MVIBM1.XLS							**1993 Information Services**										
Copyright 1994 by INPUT							**Actual User Expenditures**										
24-May-94							**by Vertical Industry**										
							($ Millions)										

Final Adjusted (for IBM) Numbers for 1993

PRODUCT/SERVICE SECTOR	Discrete Mfg ($M)	Process Mfg ($M)	Transp ($M)	Utilities ($M)	Telecom ($M)	Retail Distr ($M)	Whlsale Distr ($M)	Banking & Finance ($M)	Insurance ($M)	Health Services ($M)	Education ($M)	Business Services ($M)	Federal Gvmt ($M)	State & Loc Gvmt ($M)	Misc Industries ($M)	Total All Industries ($M)	April 11 Prog Mgr Estimate ($M)	Difference ($M)
SECTOR TOTAL	14687	7380	4214	1751	4037	2696	2813	14657	5249	5419	2050	5396	11366	6863	1301	89879		
Professional Services	5194	2569	269	362	1250	257	410	2588	1600	319	98	352	2600	2900	142	20910	20910	0
- IS Consulting	1342	644	67	119	277	66	90	688	403	78	26	96	517	744	35	5192		
- Education & Training	827	342	36	81	185	38	60	375	232	45	15	49	455	402	21	3163		
- Software Development	3025	1583	166	162	788	153	260	1525	965	196	57	207	1628	1754	86	12555		
Systems Integration	1631	447	225	634	293	409	211	601	245	310	121	235	3730	1015	9	10116	10650	534
- Equipment	957	172	78	206	78	242	67	198	39	107	41	58	1999	368	4	4614		
- Software Products	116	44	14	58	20	30	15	39	22	28	10	31	270	64	1	762		
- Professional Services	505	210	126	345	192	126	123	335	179	175	68	134	1296	556	4	4374		
- Other	53	21	7	25	3	11	6	29	5		2	12	165	27	0	366		
Outsourcing	851	954	237	70	82	432	247	2963	1427	1258	281	221	1483	1998	23	12527	12528	1
- Platform Operations	299	311	116	34	24	195	110	722	574	497	194	58	445	458	8	4045		
- Applications Operations	338	419	76	19	38	133	78	1446	522	462	76	111	712	1055	10	5495		
- Desktop Services	115	120	25	9	10	60	34	352	179	157	4	26	178	225	3	1497		
- Network Management	99	104	20	8	10	44	25	318	152	142	7	26	148	260	2	1365		
- Applications Management								125								125		
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Utility Processing																		
- Other Processing																		
Network Services	129	1110	427	32	142	271	411	897	258	671	254	691	1241	152	161	6847		
- Electronic Information Svcs	62	941	309	29	116	172	79	792	193	386	163	670	323	56	150	4441		
- Network Applications	67	169	116	3	26	99	332	105	65	285	91	21	918	96	11	2406		
Applications Software	2706	815	478	260	485	341	661	2355	997	1237	828	1192	708	219	284	13566		
- Mainframe	405	197	157	56	225	51	258	1028	351	414	85	118	106	63	13	3527		
- Minicomputer	1284	267	124	76	120	150	151	745	126	335	195	249	177	44	100	4143		
- Workstation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896		
Turnkey Systems	3282	696	310	114	590	800	548	1115	327	1071	262	975	1436	210	545	12281		
- Equipment	1378	331	147	50	255	351	243	479	145	497	120	326	646	92	238	5298		
- Software Products	1297	252	118	44	230	305	205	430	124	400	100	324	546	80	205	4660		
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	2323		

1993 Information Services Expenditures for Use by IBM

Handwritten annotations (various colors): "5/24", "OK", "ALL FILES UPDATED", "NO", checkmarks across top

Left margin: "○ = Changes Read / 4 = NOT DONE YET"

Right margin: "= CHANGES ACTUALLY MADE"; "CHANGES AS OF 5/12 REVIEWED W/ JOHN RAE"; "W/ WHAT ABOUT THESE"

MVIBM1.XLS			**1993 Information Services Actual User Expenditures by Vertical Industry ($ Millions)**															
Copyright 1994 by INPUT																		
10-May-94																		
			Worksheet for Adjusting These Numbers to Agree With April Forecast															
PRODUCT/SERVICE SECTOR	Discrete Mfg ($M)	Process Mfg ($M)	Transp ($M)	Utilities ($M)	Telcom ($M)	Retail Distr ($M)	Whlsale Distr ($M)	Banking & Finance ($M)	Insurance ($M)	Health Services ($M)	Education ($M)	Business Services ($M)	Federal Gvmt ($M)	State & Loc Gvmt ($M)	Misc Industries ($M)	Total All Industries ($M)	April 11 Prog Mgr Estimate ($M)	Difference (%)
SECTOR TOTAL	14687	7199	4214	1751	4063	2696	2813	14657	5282	5449	2050	5396	11406	7059	1300	90022		
Professional Services	5194	2735	269	362	1278	257	410	2588	1603	319	98	352	269	517	142	21004	20910	-94
- IS Consulting	1342	686	67	119	297	66	90	588	420	78	26	96	517	776	35	5303		
- Education & Training	827	365	36	81	199	38	60	375	242	45	15	49	435	420	21	3228		
- Software Development	3025	1887	166	162	845	153	260	1625	1006	196	57	207	1625	1830	86	12833		
Systems Integration	1631	447	225	634	293	409	211	601	245	310	121	235	3735	1940	9	10241	10650	409
- Equipment	957	172	78	206	78	242	67	198	39	107	41	58	1999	368	4	4614		
- Software Products	116	44	14	58	20	30	15	39	22	28	10	31	270	64	1	762		
- Professional Services	505	210	126	345	192	126	123	335	179	175	68	134	1296	1556	4	4374		
- Other	53	21	7	25	3	11	6	29	5		2	12	165	27	0	366		
Outsourcing	851	604	237	70	82	432	247	2963	1467	1248	281	221	3512	2173	22	12451	12528	77
- Platform Operations	299	197	116	34	24	195	110	722	574	497		58	445	458	8	3942		
- Applications Operations	338	265	76	19	38	133	78	1446	522	462	76	111	712	1055	10	5341		
- Desktop Services	115	76	25	9	10	60	34	352	179	157	7	26	178	225	3	1449		
- Network Management	99	66	20	8	10	44	25	318	152	142	7	26	148	260	2	1320		
- Applications Management								125								125		
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Utility Processing																		
- Other Processing																		
Network Services	129	1110	427	32	142	271	411	897	258	671	254	691	1241	152	161	6847		
- Electronic Information Svcs	62	941	309	29	116	172	79	792	193	386	163	670	323	56	150	4441		
- Network Applications	67	169	118	3	26	99	332	105	65	285	91	21	918	96	11	2406		
Applications Software	2706	815	478	260	485	341	661	2355	997	1237	828	1192	708	219	284	13566		
- Mainframe	405	197	197	56	225	51	268	1028	351	414	85	118	106	63	13	3527		
- Minicomputer	1284	267	124	76	120	150	151	745	126	335	195	249	177	44	100	4143		
- Workstation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896		
Turnkey Systems	3282	696	310	114	590	800	548	1115	327	1071	262	975	1436	210	545	12281		
- Equipment	1378	331	147	50	255	351	243	479	145	497	120	326	646	92	238	5298		
- Software Products	1297	262	118	44	230	305	205	430	124	400	100	324	546	80	205	4660		
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	2323		
Reports published or in production --->	X	X	X			X	X	X			X	X			X			

NOTES: Figures adjusted (on this first pass) to agree with 4/11 estimates are in bold italics
Only the delivery mode totals have been altered, the sub-modes will be adjusted later
SI is the only problem. Not enough dollars left to absorb adjustment, unless we change the Federal sector.

For now, I have done the following:

(1) Adjustments have been made to PS and OS bringing them to agreement with 4/11 estimates
Since we are within $100M there should not be any further changes needed

(2) SI is a problem. There aren't enough dollars left to absorb the difference, other than with the Federal sector
I've absorbed $125M of the needed $440M additional spending in the State&Loc sector.
The other sectors are to small to absorb any meaningful additional spending. I suggest that you speak
with Wilson and Bob Deller to add the balance of the adjustment ($315M) to the Federal SI number. It would
be less than a 1% increase.

MVIBM.XLS						**1993 Information Services**									
Copyright 1994 by INPUT						**Actual User Expenditures**									
6-May-94						**by Vertical Industry**									
						($ Millions)									

PRODUCT/SERVICE SECTOR	Discrete Mfg ($M)	Process Mfg ($M)	Transp ($M)	Utilities ($M)	Telcom ($M)	Retail Distr ($M)	Whlsale Distr ($M)	Banking & Finance ($M)	Insurance ($M)	Health Services ($M)	Education ($M)	Business Services ($M)	Federal Gvmt ($M)	State & Loc Gvmt ($M)	Misc Industries ($M)	Total All Industries ($M)
SECTOR TOTAL	14687	7199	4214	1751	4128	2696	2813	14657	5317	5419	2050	5396	11366	6989	1300	89982
Professional Services	5194	2738	269	362	1341	257	410	2588	1668	319	98	352	2600	3026	142	21364
- IS Consulting	1342	686	67	119	297	66	90	688	420	78	26	96	517	776	35	5303
- Education & Training	827	365	36	81	199	38	60	375	242	45	15	49	455	420	21	3228
- Software Development	3025	1687	166	162	845	153	260	1525	1006	196	57	207	1628	1830	86	12833
Systems Integration	1631	447	225	634	293	409	211	601	245	310	121	235	3730	1015	9	10116
- Equipment	957	172	78	206	78	242	67	198	39	107	41	58	1999	368	4	4614
- Software Products	116	44	14	58	20	30	15	39	22	28	10	31	270	64	1	762
- Professional Services	505	210	126	345	192	126	123	335	179	175	68	134	1296	556	4	4374
- Other	53	21	7	25	3	11	6	29	5		2	12	165	27	0	366
Outsourcing	851	604	237	70	82	432	247	2963	1427	1258	281	221	1483	1998	22	12176
- Platform Operations	299	197	116	34	24	195	110	722	574	497	205	58	445	458	8	3942
- Applications Operations	338	265	76	19	38	133	78	1446	522	462	76	111	712	1055	10	5341
- Desktop Services	115	76	25	9	10	60	34	352	179	157		26	178	225	3	1449
- Network Management	99	66	20	8	10	44	25	318	152	142		26	148	260	2	1320
- Applications Management								125								125
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632
- Utility Processing																
- Other Processing																
Network Services	129	1110	427	32	142	271	411	897	258	671	254	691	1241	152	161	6847
- Electronic Information Svcs	62	941	309	29	116	172	79	792	193	386	163	670	323	56	150	4441
- Network Applications	67	169	118	3	26	99	332	105	65	285	91	21	918	96	11	2406
Applications Software	2706	815	478	260	485	341	661	2355	997	1237	828	1192	708	219	284	13566
- Mainframe	405	197	157	56	225	51	258	1028	351	414	85	118	106	63	13	3527
- Minicomputer	1284	267	124	76	120	150	151	745	126	335	195	249	177	44	100	4143
- Workstation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896
Turnkey Systems	3282	696	310	114	590	800	548	1115	327	1071	262	975	1436	210	545	12281
- Equipment	1378	331	147	50	255	351	243	479	145	497	120	326	646	92	238	5298
- Software Products	1297	252	118	44	230	305	205	430	124	400	100	324	546	80	205	4660
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	2323

	NOTES		
		Figures adjusted (on this first pass) to agree with 4/11 estimates are in bold italics	
		Only the delivery mode totals have been altered, the sub-modes will be adjusted later	
		SI is the only problem. Not enough dollars left to absorb adjustment, unless we can change the Federal scetor.	
		For now, I have done the following	
	(1)	Adjustments have been made to PS and OS to bring them to agreement with 4/11 estimates	
		Since we are within $100M there should not be any further changes needed.	
	(2)	SI is a problem. There aren't enough dollars left to absorb the difference, other than with the Federal sector.	
		I've absorbed $125M of the needed $440M additional spending in the State&Loc sector.	
		The other sectors are to small to absorb any meaningful additional spending. I suggest that you speak	
		with Wilson and Bob Deller to add the balance of the adjustment ($315M) to the Federal SI number. It would	
		be less than a 1% increase.	

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6-May-94						by Vertical Industry									
						($ Millions)									
PRODUCT/SERVICE SECTOR	Discrete Mfg ($M)	Process Mfg ($M)	Transp ($M)	Utilities ($M)	Telecom ($M)	Retail Distr ($M)	Whlsale Distr ($M)	Banking & Finance ($M)	Insurance ($M)	Health Services ($M)	Education ($M)	Business Services ($M)	Federal Gvmt ($M)	State & Loc Gvmt ($M)	Misc Industries ($M)	Total All Industries ($M)
SECTOR TOTAL	14687	7199	4214	1751	4128	2696	2813	14657	5317	5419	2050	5396	11366	6989	1300	89982
Professional Services	5194	2738	269	362	1341	257	410	2588	1668	319	98	352	2600	3026	142	21364
- IS Consulting	1342	686	67	119	297	66	90	688	420	78	26	96	517	776	35	5303
- Education & Training	827	365	36	81	199	38	60	375	242	45	15	49	455	420	21	3228
- Software Development	3025	1687	166	162	845	153	260	1525	1006	196	57	207	1628	1830	86	12833
Systems Integration	1631	447	225	634	293	409	211	601	245	310	121	235	3730	1015	9	10116
- Equipment	957	172	78	206	78	242	67	198	39	107	41	58	1999	368	4	4614
- Software Products	116	44	14	58	20	30	15	39	22	28	10	31	270	64	1	762
- Professional Services	505	210	126	345	192	126	123	335	179	175	68	134	1296	556	4	4374
- Other	53	21	7	25	3	11	6	29	5		2	12	165	27	0	366
Outsourcing	851	604	237	70	82	432	247	2963	1427	1258	281	221	1483	1998	22	12176
- Platform Operations	299	197	116	34	24	195	110	722	574	497	205	58	445	458	8	3942
- Applications Operations	338	265	76	19	38	133	78	1446	522	462	76	111	712	1055	10	5341
- Desktop Services	115	76	25	9	10	60	34	352	179	157		26	178	225	3	1449
- Network Management	99	66	20	8	10	44	25	318	152	142		26	148	260	2	1320
- Applications Management								125								125
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632
- Utility Processing																
- Other Processing																
Network Services	129	1110	427	32	142	271	411	897	258	671	254	691	1241	152	161	6847
- Electronic Information Svcs	62	941	309	29	116	172	79	792	193	386	163	670	323	56	150	4441
- Network Applications	67	169	118	3	26	99	332	105	65	285	91	21	918	96	11	2406
Applications Software	2706	815	478	260	485	341	661	2355	997	1237	828	1192	708	219	284	13566
- Mainframe	405	197	157	56	225	51	258	1028	351	414	85	118	106	63	13	3527
- Minicomputer	1284	267	124	76	120	150	151	745	126	335	195	249	177	44	100	4143
- Workstation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896
Turnkey Systems	3282	696	310	114	590	800	548	1115	327	1071	262	975	1436	210	545	12281
- Equipment	1378	331	147	50	255	351	243	479	145	497	120	326	646	92	238	5298
- Software Products	1297	252	118	44	230	305	205	430	124	400	100	324	546	80	205	4660
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	2323

INPUT

IT Intelligence Services

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050
Fax (201) 801-0441

FAX TRANSMITTAL FORM

Date: 5/13/94

To: Name: ~~Bob H~~ JOANNE P.

Tel./Location: _____

Co.: _____

Fax No: _____

From: Name: JP / Mc._____ J. McGILVARY

Subject: _____

Confidential: Y / N

Urgent: Y / N

Page: 1 of ~~10~~

File: Chron
Contact: 1 ONLY
Other:

Here on the pp — please approve Now!!

5/13/94 —
JOANNE —
    I HAVE REVIEWED THE NUMBERS
SENT TO ME/BOB, AND WITH THE EXCEPTION
OF THE ROUNDING VARIANCES (UNITS POSITION
ONLY) AND THE EXCLUSION OF APPLICATION
Mgmt $ IN THE BANKING & FINANCE
REPORT, WE ARE IN AGREEMENT!

WITNESS: Bob Goodwin (Hi. ____) JM

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
DISCRETE MANUFACTURING		
PROFESSIONAL SERVICES	4822	5194
CONSULTING	1192	1342
SOFTWARE DEVELOPMENT	2880	3025
EDUCATION/TRAINING	750	827
SYSTEMS OPERATIONS	711	851
PLATFORM OPERATIONS	258	299
APPLICATIONS OPERATIONS	300	338
NETWORK MANAGEMENT	68	99
DESKTOP SERVICES	85	115
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	420	505
SOFTWARE DEVELOPMENT	226	272
DESIGN/INTEGRATION	78	94
PROJECT MGMT/CONSULTING	77	92
EDUCATION/TRAINING	19	23
OPERATIONS/MAINTENANCE	20	24
TOTAL	6038	6665
PROCESS MANUFACTURING		
PROFESSIONAL SERVICES	2370	2569
CONSULTING	605	644
SOFTWARE DEVELOPMENT	1430	1583
EDUCATION/TRAINING	335	342
SYSTEMS OPERATIONS	748	954
PLATFORM OPERATIONS	281	311
APPLICATIONS OPERATIONS	344	419
NETWORK MANAGEMENT	48	104
DESKTOP SERVICES	75	120
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	180	210
SOFTWARE DEVELOPMENT	98	115
DESIGN/INTEGRATION	27	31
PROJECT MGMT/CONSULTING	32	38
EDUCATION/TRAINING	11	13
OPERATIONS/MAINTENANCE	12	13
TOTAL	3373	3853

OK (handwritten)

OK (handwritten)

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
TRANSPORTATION		
PROFESSIONAL SERVICES	250	269
CONSULTING	59	67
SOFTWARE DEVELOPMENT	157	166
EDUCATION/TRAINING	34	36
SYSTEMS OPERATIONS	207	237
PLATFORM OPERATIONS	103	116
APPLICATIONS OPERATIONS	70	76
NETWORK MANAGEMENT	14	20
DESKTOP SERVICES	20	25
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	104	126
SOFTWARE DEVELOPMENT	58	69
DESIGN/INTEGRATION	17	21
PROJECT MGMT/CONSULTING	21	26
EDUCATION/TRAINING	5	6
OPERATIONS/MAINTENANCE	3	4
TOTAL	581	657
UTILITIES		
PROFESSIONAL SERVICES	276	362
CONSULTING	90	119
SOFTWARE DEVELOPMENT	122	162
EDUCATION/TRAINING	62	81
SYSTEMS OPERATIONS	58	70
PLATFORM OPERATIONS	30	34
APPLICATIONS OPERATIONS	16	19
NETWORK MANAGEMENT	5	8
DESKTOP SERVICES	7	9
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	308	345
SOFTWARE DEVELOPMENT	173	193
DESIGN/INTEGRATION	44	49
PROJECT MGMT/CONSULTING	63	71
EDUCATION/TRAINING	18	20
OPERATIONS/MAINTENANCE	10	12
TOTAL	647	786

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
TELECOMMUNICATIONS		
PROFESSIONAL SERVICES	1200	1250
CONSULTING	252	277
SOFTWARE DEVELOPMENT	788	788
EDUCATION/TRAINING	160	185
SYSTEMS OPERATIONS	73	82
PLATFORM OPERATIONS	22	24
APPLICATIONS OPERATIONS	35	38
NETWORK MANAGEMENT	6	10
DESKTOP SERVICES	10	10
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	154	192
SOFTWARE DEVELOPMENT	86	107
DESIGN/INTEGRATION	24	30
PROJECT MGMT/CONSULTING	30	37
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	8	10
TOTAL	1437	1534
RETAIL DISTRIBUTION		
PROFESSIONAL SERVICES	238	257
CONSULTING	57	66
SOFTWARE DEVELOPMENT	146	153
EDUCATION/TRAINING	35	38
SYSTEMS OPERATIONS	337	432
PLATFORM OPERATIONS	113	195
APPLICATIONS OPERATIONS	160	133
NETWORK MANAGEMENT	33	44
DESKTOP SERVICES	31	60
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	155	126
SOFTWARE DEVELOPMENT	80	65
DESIGN/INTEGRATION	31	25
PROJECT MGMT/CONSULTING	30	24
EDUCATION/TRAINING	7	6
OPERATIONS/MAINTENANCE	7	6
TOTAL	761	875

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
WHOLESALE DISTRIBUTION		
PROFESSIONAL SERVICES	378	410
CONSULTING	85	90
SOFTWARE DEVELOPMENT	237	260
EDUCATION/TRAINING	56	60
SYSTEMS OPERATIONS	213	247
PLATFORM OPERATIONS	96	110
APPLICATIONS OPERATIONS	72	78
NETWORK MANAGEMENT	20	25
DESKTOP SERVICES	25	34
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	106	122 *(circled)* 123
SOFTWARE DEVELOPMENT	57	67
DESIGN/INTEGRATION	20	23
PROJECT MGMT/CONSULTING	19	22
EDUCATION/TRAINING	5	5
OPERATIONS/MAINTENANCE	5	5
TOTAL	722	813
BANKING AND FINANCE		
PROFESSIONAL SERVICES	2379	2588
CONSULTING	585	688
SOFTWARE DEVELOPMENT	1468	1525
EDUCATION/TRAINING	326	375
SYSTEMS OPERATIONS	2571	2838 *(circled)* 2963
PLATFORM OPERATIONS	841	722
APPLICATIONS OPERATIONS	1220	1446
NETWORK MANAGEMENT	275	318
DESKTOP SERVICES	235	352
APPLICATIONS MANAGEMENT		125
SYSTEMS INTEGRATION	287	335
SOFTWARE DEVELOPMENT	143	167
DESIGN/INTEGRATION	57	67
PROJECT MGMT/CONSULTING	57	67
EDUCATION/TRAINING	15	17
OPERATIONS/MAINTENANCE	15	17
TOTAL	5472	6113

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
INSURANCE		
PROFESSIONAL SERVICES	1569	1600
CONSULTING	384	403
SOFTWARE DEVELOPMENT	970	965
EDUCATION/TRAINING	215	232
SYSTEMS OPERATIONS	1213	1427
PLATFORM OPERATIONS	498	574
APPLICATIONS OPERATIONS	465	522
NETWORK MANAGEMENT	110	152
DESKTOP SERVICES	140	179
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	162	179
SOFTWARE DEVELOPMENT	85	95
DESIGN/INTEGRATION	32	34
PROJECT MGMT/CONSULTING	27	30
EDUCATION/TRAINING	9	10
OPERATIONS/MAINTENANCE	9	10
TOTAL	3084	3385
MEDICAL		
PROFESSIONAL SERVICES	291	319
CONSULTING	70	78
SOFTWARE DEVELOPMENT	181	196
EDUCATION/TRAINING	40	45
SYSTEMS OPERATIONS	1126	1258
PLATFORM OPERATIONS	453	497
APPLICATIONS OPERATIONS	440	462
NETWORK MANAGEMENT	103	142
DESKTOP SERVICES	130	157
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	140	175
SOFTWARE DEVELOPMENT	78	96
DESIGN/INTEGRATION	22	28
PROJECT MGMT/CONSULTING	24	31
EDUCATION/TRAINING	8	10
OPERATIONS/MAINTENANCE	8	10
TOTAL	1687	1909

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
EDUCATION		
PROFESSIONAL SERVICES	90	98
CONSULTING	23	26
SOFTWARE DEVELOPMENT	54	57
EDUCATION/TRAINING	13	15
SYSTEMS OPERATIONS	245	281
PLATFORM OPERATIONS	172	194
APPLICATIONS OPERATIONS	65	76
NETWORK MANAGEMENT	5	7
DESKTOP SERVICES	3	4
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	59	68
SOFTWARE DEVELOPMENT	33	37
DESIGN/INTEGRATION	10	12
PROJECT MGMT/CONSULTING	11	12
EDUCATION/TRAINING	2	3
OPERATIONS/MAINTENANCE	3	4
TOTAL	397	451
BUSINESS SERVICES		
PROFESSIONAL SERVICES	326	352
CONSULTING	85	96
SOFTWARE DEVELOPMENT	195	207
EDUCATION/TRAINING	46	49
SYSTEMS OPERATIONS	183	221
PLATFORM OPERATIONS	51	58
APPLICATIONS OPERATIONS	95	111
NETWORK MANAGEMENT	20	26
DESKTOP SERVICES	17	26
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	107	134
SOFTWARE DEVELOPMENT	49	61
DESIGN/INTEGRATION	23	29
PROJECT MGMT/CONSULTING	23	29
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	6	7
TOTAL	633	733

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
FEDERAL GOVERNMENT		
PROFESSIONAL SERVICES	2128	2600
CONSULTING	420	517
SOFTWARE DEVELOPMENT	1364	1628
EDUCATION/TRAINING	344	455
SYSTEMS OPERATIONS	1760	1483
PLATFORM OPERATIONS	546	445
APPLICATIONS OPERATIONS	820	712
NETWORK MANAGEMENT	131	148
DESKTOP SERVICES	263	178
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	5852	5557
STATE & LOCAL GOVERNMENT		
PROFESSIONAL SERVICES	2840	2900
CONSULTING	710	744
SOFTWARE DEVELOPMENT	1728	1754
EDUCATION/TRAINING	402	402
SYSTEMS OPERATIONS	1770	1998
PLATFORM OPERATIONS	410	458
APPLICATIONS OPERATIONS	975	1055
NETWORK MANAGEMENT	210	260
DESKTOP SERVICES	175	225
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	485	556
SOFTWARE DEVELOPMENT	261	298
DESIGN/INTEGRATION	75	86
PROJECT MGMT/CONSULTING	109	125
EDUCATION/TRAINING	24	29
OPERATIONS/MAINTENANCE	16	18
TOTAL	5270	5679

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)
MISCELLANEOUS INDUSTRIES		
PROFESSIONAL SERVICES	132	142
CONSULTING	32	35
SOFTWARE DEVELOPMENT	80	86
EDUCATION/TRAINING	20	21
SYSTEMS OPERATIONS	20	23
PLATFORM OPERATIONS	7	8
APPLICATIONS OPERATIONS	9	10
NETWORK MANAGEMENT	2	2
DESKTOP SERVICES	2	3
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	4	4
SOFTWARE DEVELOPMENT	2	2
DESIGN/INTEGRATION	1	1
PROJECT MGMT/CONSULTING	1	1
EDUCATION/TRAINING	*	*
OPERATIONS/MAINTENANCE	*	*
TOTAL	158	172

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 (SM)	1993 (SM)
GRAND TOTAL		
PROFESSIONAL SERVICES	19287	20910
CONSULTING	4649	5192
SOFTWARE DEVELOPMENT	11800	12555
EDUCATION/TRAINING	2838	3163
SYSTEMS OPERATIONS	11235	12402
PLATFORM OPERATIONS	3881	4045
APPLICATIONS OPERATIONS	5086	5495
NETWORK MANAGEMENT	1050	1365
DESKTOP SERVICES	1218	1497
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION (COMM)	2671	3077
SOFTWARE DEVELOPMENT	1429	1644
DESIGN/INTEGRATION	461	530
PROJECT MGMT/CONSULTING	524	605
EDUCATION/TRAINING	135	158
OPERATIONS/MAINTENANCE	122	140
SYSTEMS INTEGRATION (FED)	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	34894	37685

FAX TRANSMITTAL FORM

Date: _5/13/94_

To: Name: _JOHN McGANN_

Tel./Location: _NJ._

Co.: _____

Fax No: _____

From: Name: _JOHN McGILVERY_

Subject: _EDUCATION: 94-99_

Confidential: Y / N

Urgent: Y / N

Page: 1 of _2_

File: Chron

Contact

Other:

HERE ARE THE EXTENDED VALUES FOR
EDUCATION FOR 1994 - 1999.

AOM 341/01 8/93

MVED.XLS				EDUCATION					
				User Expenditures Forecast					
Copyright 1994 by INPUT				by Delivery Mode, 1993-1999					
12-May-94				($ Millions)					
				Revision #1					
		Growth							CAGR
DELIVERY MODES	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
	($)	(%)	($)	($)	($)	($)	($)	($)	(%)
				12%	12%	12%	12%	13%	
SECTOR TOTAL	2050	12%	2290	2559	2866	3211	3611	4064	12%
				10%	11%	9%	10%	11%	
Professional Services	98	12%	110	121	134	146	161	178	10%
- IS Consulting	26	15%	30	33	39	42	48	55	13%
- Education & Training	15	13%	17	19	21	23	25	27	10%
- Software Development	57	11%	63	69	74	81	88	96	9%
				18%	20%	17%	15%	15%	
Systems Integration	121	16%	140	165	198	231	266	305	17%
- Equipment	41	17%	48	56	67	79	91	105	17%
- Software Products	10	10%	11	13	16	19	22	25	18%
- Professional Services	68	15%	78	93	111	129	148	170	17%
- Other	2	50%	3	3	4	4	5	5	11%
				16%	16%	19%	18%	18%	
Outsourcing	281	16%	326	379	441	525	619	730	17%
- Platform Operations	194	15%	223	255	290	346	408	483	17%
- Applications Operations	76	18%	90	109	134	159	187	220	20%
- Desktop Services	4	25%	5	6	6	7	8	9	12%
- Network Management	7	28%	8	9	11	13	16	18	18%
				2%	1%	2%	2%	2%	
Processing Services	206	3%	212	217	220	224	229	233	2%
- Transaction Processing	206	3%	212	217	220	224	229	233	2%
- Utility Processing									
- Other Processing									
				17%	16%	16%	17%	17%	
Network Services	254	17%	298	348	404	469	547	638	16%
- Electronic Information Svcs	163	18%	192	225	263	307	359	420	17%
- Network Applications	91	16%	106	123	141	162	188	218	16%
				12%	12%	11%	12%	12%	
Applications Software	828	12%	927	1034	1154	1282	1430	1595	11%
- Mainframe	85	1%	86	88	88	89	90	89	1%
- Minicomputer	195	8%	211	226	239	250	266	283	6%
- Workstation/PC	548	15%	630	720	827	943	1074	1223	14%
				6%	7%	6%	7%	7%	
Turnkey Systems	262	6%	277	295	315	334	359	385	7%
- Equipment	120	6%	127	135	143	150	160	171	6%
- Software Products	100	5%	105	112	120	129	140	152	8%
- Professional Services	42	7%	45	48	52	55	59	62	7%
				Revision					

NOTE: This version contains changes to outsourcing driven by the IBM project. The original numbers for 1989 through 1993 had values for platform and applications operations only. The 1993 Compendium had values for all four sub-modes and the amounts were unattributable. This change allows the future addition of values for desktop and network spending in a structured way. No change to the outsourcing or eductation industry totals has occurred, and no change to the text of the report is necessary, since only the global outsourcing amount was addressed. In addition, no change is necessary for th reconciliation, since it is made at the mode level only.

INPUT®

IT Intelligence Services

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050
Fax (201) 801-0441

FAX TRANSMITTAL FORM

Date: _____

To: Name: _John McGilvray_____

Tel./Location: _____

Co.: _____

Fax No: _____

From: Name: _____

Subject: _____

Confidential: Y / N
Urgent: Y / N

Page: 1 of _2_

File: Chron
        Contact
        Other:

Correction

Education #s
Should be ones
on following sheet
Right?

yes!

John

ADN 341/06 8/93

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	2000 ($M)	CAGR 93-98
EDUCATION										
PROFESSIONAL SERVICES	90	98	110	121	135	148	162	179	11%	11%
CONSULTING	23	26	30	33	39	43	48	54	13%	13%
SOFTWARE DEVELOPMENT	54	57	63	69	75	82	89	97	9%	9%
EDUCATION/TRAINING	13	15	17	19	21	23	25	28	11%	11%
SYSTEMS OPERATIONS	245	281	323	377	444	532	628	895	17%	17%
PLATFORM OPERATIONS	172	194	60	66	74	83	92	79	-14%	-14%
APPLICATIONS OPERATIONS	65	76	187	217	252	302	353	480	36%	36%
NETWORK MANAGEMENT	5	7	36	40	45	54	61	94	54%	54%
DESKTOP SERVICES	3	4	40	54	73	93	122	242	98%	98%
APPLICATIONS MANAGEMENT								0		
SYSTEMS INTEGRATION	59	68	79	92	113	131	155	183	18%	18%
SOFTWARE DEVELOPMENT	33	37	43	51	62	72	85	100	18%	18%
DESIGN/INTEGRATION	10	12	14	16	20	23	27	32	18%	18%
PROJECT MGMT/CONSULTING	11	12	14	16	20	23	27	32	18%	18%
EDUCATION/TRAINING	2	3	3	4	4	5	6	7	15%	15%
OPERATIONS/MAINTENANCE	3	4	5	5	7	8	10	12	20%	20%
TOTAL	397	451	552	644	765	904	1067	1499	19%	19%
BUSINESS SERVICES										
PROFESSIONAL SERVICES	326	352	376	408	441	477	517	559	8%	8%
CONSULTING	85	96	106	119	133	149	167	187	12%	12%
SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276	292	6%	6%
EDUCATION/TRAINING	46	49	52	57	62	68	74	80	9%	9%
SYSTEMS OPERATIONS	183	221	262	319	380	454	548	661	20%	20%
PLATFORM OPERATIONS	51	58	65	74	83	95	107	121	13%	13%
APPLICATIONS OPERATIONS	95	111	133	162	191	225	270	323	19%	19%
NETWORK MANAGEMENT	20	26	31	38	46	57	69	84	22%	22%
DESKTOP SERVICES	17	26	33	45	60	77	102	134	31%	31%
APPLICATIONS MANAGEMENT								0		
SYSTEMS INTEGRATION	107	134	141	163	202	250	309	365	18%	18%
SOFTWARE DEVELOPMENT	49	61	65	75	92	114	141	167	18%	18%
DESIGN/INTEGRATION	23	29	30	35	43	54	67	79	18%	18%
PROJECT MGMT/CONSULTING	23	29	30	35	43	54	67	79	18%	18%
EDUCATION/TRAINING	6	8	8	9	12	14	17	20	16%	16%
OPERATIONS/MAINTENANCE	6	7	8	9	12	14	17	20	19%	19%
TOTAL	633	733	812	935	1083	1258	1476	1720	15%	15%

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FAX TRANSMITTAL FORM

Date: _5/12_

To: Name: _John Mc Gilvray_

Tel./Location: _____

Co.: _____

Fax No: _____

From: Name: _John McGann_

Subject: _____

Confidential: Y / N

Urgent: Y / N

Page: 1 of _10_

File: Chron

Contact

Other:

Changes in 93 nos are
blocked out. Please OK
those nos and return to
us so we know we are in proof.

Thanks,

John

ADM 341/05 8/93

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 (SM)	1993 (SM)
DISCRETE MANUFACTURING		
PROFESSIONAL SERVICES	4822	5194
CONSULTING	1192	1342
SOFTWARE DEVELOPMENT	2680	3025
EDUCATION/TRAINING	750	827
SYSTEMS OPERATIONS	711	851
PLATFORM OPERATIONS	258	299
APPLICATIONS OPERATIONS	300	338
NETWORK MANAGEMENT	68	99
DESKTOP SERVICES	85	115
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	420	505
SOFTWARE DEVELOPMENT	226	272
DESIGN/INTEGRATION	78	94
PROJECT MGMT/CONSULTING	77	92
EDUCATION/TRAINING	19	23
OPERATIONS/MAINTENANCE	20	24
TOTAL	6038	6665
PROCESS MANUFACTURING		
PROFESSIONAL SERVICES	2370	2569
CONSULTING	605	644
SOFTWARE DEVELOPMENT	1430	1583
EDUCATION/TRAINING	335	342
SYSTEMS OPERATIONS	748	954
PLATFORM OPERATIONS	281	311
APPLICATIONS OPERATIONS	344	419
NETWORK MANAGEMENT	48	104
DESKTOP SERVICES	75	120
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	180	210
SOFTWARE DEVELOPMENT	98	115
DESIGN/INTEGRATION	27	31
PROJECT MGMT/CONSULTING	32	38
EDUCATION/TRAINING	11	13
OPERATIONS/MAINTENANCE	12	13
TOTAL	3573	3853

OK

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
TRANSPORTATION		
PROFESSIONAL SERVICES	250	269
CONSULTING	59	67
SOFTWARE DEVELOPMENT	157	166
EDUCATION/TRAINING	34	36
SYSTEMS OPERATIONS	207	237
PLATFORM OPERATIONS	103	116
APPLICATIONS OPERATIONS	70	76
NETWORK MANAGEMENT	14	20
DESKTOP SERVICES	20	25
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	104	126
SOFTWARE DEVELOPMENT	58	69
DESIGN/INTEGRATION	17	21
PROJECT MGMT/CONSULTING	21	26
EDUCATION/TRAINING	5	6
OPERATIONS/MAINTENANCE	3	4
TOTAL	581	657
UTILITIES		
PROFESSIONAL SERVICES	274	362
CONSULTING	90	119
SOFTWARE DEVELOPMENT	122	162
EDUCATION/TRAINING	62	81
SYSTEMS OPERATIONS	58	70
PLATFORM OPERATIONS	30	34
APPLICATIONS OPERATIONS	16	19
NETWORK MANAGEMENT	5	8
DESKTOP SERVICES	7	9
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	308	345
SOFTWARE DEVELOPMENT	173	195
DESIGN/INTEGRATION	44	49
PROJECT MGMT/CONSULTING	63	71
EDUCATION/TRAINING	18	20
OPERATIONS/MAINTENANCE	10	12
TOTAL	647	786

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
TELECOMMUNICATIONS		
PROFESSIONAL SERVICES	1200	1250
CONSULTING	252	277
SOFTWARE DEVELOPMENT	788	788
EDUCATION/TRAINING	160	185
SYSTEMS OPERATIONS	73	82
PLATFORM OPERATIONS	22	24
APPLICATIONS OPERATIONS	35	38
NETWORK MANAGEMENT	6	10
DESKTOP SERVICES	10	10
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	154	192
SOFTWARE DEVELOPMENT	86	107
DESIGN/INTEGRATION	24	30
PROJECT MGMT/CONSULTING	30	37
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	8	10
TOTAL	1437	1534
RETAIL DISTRIBUTION		
PROFESSIONAL SERVICES	238	257
CONSULTING	57	66
SOFTWARE DEVELOPMENT	146	153
EDUCATION/TRAINING	35	38
SYSTEMS OPERATIONS	337	432
PLATFORM OPERATIONS	113	195
APPLICATIONS OPERATIONS	160	133
NETWORK MANAGEMENT	33	44
DESKTOP SERVICES	31	60
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	155	126
SOFTWARE DEVELOPMENT	80	65
DESIGN/INTEGRATION	31	25
PROJECT MGMT/CONSULTING	30	24
EDUCATION/TRAINING	7	6
OPERATIONS/MAINTENANCE	7	6
TOTAL	761	875

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 (\$M)	1993 (\$M)
WHOLESALE DISTRIBUTION		
PROFESSIONAL SERVICES	378	410
CONSULTING	85	90
SOFTWARE DEVELOPMENT	237	260
EDUCATION/TRAINING	56	60
SYSTEMS OPERATIONS	213	247
PLATFORM OPERATIONS	96	110
APPLICATIONS OPERATIONS	72	78
NETWORK MANAGEMENT	20	25
DESKTOP SERVICES	25	34
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	106	122
SOFTWARE DEVELOPMENT	57	67
DESIGN/INTEGRATION	20	23
PROJECT MGMT/CONSULTING	19	22
EDUCATION/TRAINING	5	5
OPERATIONS/MAINTENANCE	5	5
TOTAL	722	813
BANKING AND FINANCE		
PROFESSIONAL SERVICES	2379	2588
CONSULTING	585	688
SOFTWARE DEVELOPMENT	1468	1525
EDUCATION/TRAINING	326	375
SYSTEMS OPERATIONS	2571	2858
PLATFORM OPERATIONS	841	722
APPLICATIONS OPERATIONS	1220	1446
NETWORK MANAGEMENT	275	318
DESKTOP SERVICES	235	352
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	287	335
SOFTWARE DEVELOPMENT	143	167
DESIGN/INTEGRATION	57	67
PROJECT MGMT/CONSULTING	57	67
EDUCATION/TRAINING	15	17
OPERATIONS/MAINTENANCE	15	17
TOTAL	5472	6113

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
INSURANCE		
PROFESSIONAL SERVICES	1569	1600
CONSULTING	384	403
SOFTWARE DEVELOPMENT	970	965
EDUCATION/TRAINING	215	232
SYSTEMS OPERATIONS	1213	1427
PLATFORM OPERATIONS	498	574
APPLICATIONS OPERATIONS	465	522
NETWORK MANAGEMENT	110	152
DESKTOP SERVICES	140	179
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	162	179
SOFTWARE DEVELOPMENT	85	95
DESIGN/INTEGRATION	32	34
PROJECT MGMT/CONSULTING	27	30
EDUCATION/TRAINING	9	10
OPERATIONS/MAINTENANCE	9	10
TOTAL	3084	3385
MEDICAL		
PROFESSIONAL SERVICES	291	319
CONSULTING	70	78
SOFTWARE DEVELOPMENT	181	196
EDUCATION/TRAINING	40	45
SYSTEMS OPERATIONS	1126	1258
PLATFORM OPERATIONS	453	497
APPLICATIONS OPERATIONS	440	662
NETWORK MANAGEMENT	103	142
DESKTOP SERVICES	130	157
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	140	175
SOFTWARE DEVELOPMENT	78	96
DESIGN/INTEGRATION	22	28
PROJECT MGMT/CONSULTING	24	31
EDUCATION/TRAINING	8	10
OPERATIONS/MAINTENANCE	8	10
TOTAL	1687	1909

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
EDUCATION		
PROFESSIONAL SERVICES	90	98
CONSULTING	23	26
SOFTWARE DEVELOPMENT	54	57
EDUCATION/TRAINING	13	15
SYSTEMS OPERATIONS	220	281
PLATFORM OPERATIONS	50	205
APPLICATIONS OPERATIONS	140	76
NETWORK MANAGEMENT	15	0
DESKTOP SERVICES	15	0
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	59	68
SOFTWARE DEVELOPMENT	33	37
DESIGN/INTEGRATION	10	12
PROJECT MGMT/CONSULTING	11	12
EDUCATION/TRAINING	2	3
OPERATIONS/MAINTENANCE	3	4
TOTAL	384	447
BUSINESS SERVICES		
PROFESSIONAL SERVICES	326	352
CONSULTING	85	96
SOFTWARE DEVELOPMENT	195	207
EDUCATION/TRAINING	46	49
SYSTEMS OPERATIONS	183	221
PLATFORM OPERATIONS	51	58
APPLICATIONS OPERATIONS	95	111
NETWORK MANAGEMENT	20	26
DESKTOP SERVICES	17	26
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	107	134
SOFTWARE DEVELOPMENT	49	61
DESIGN/INTEGRATION	23	29
PROJECT MGMT/CONSULTING	23	29
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	6	7
TOTAL	633	733

(handwritten annotations: "4f OK" near PLATFORM OPERATIONS 205; "#" and check mark near NETWORK MANAGEMENT / DESKTOP SERVICES; red circle around values 205, 76, 0, 0)

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
FEDERAL GOVERNMENT		
PROFESSIONAL SERVICES	2128	2600
CONSULTING	420	517
SOFTWARE DEVELOPMENT	1364	1628
EDUCATION/TRAINING	344	455
SYSTEMS OPERATIONS	1760	1483
PLATFORM OPERATIONS	546	445
APPLICATIONS OPERATIONS	820	712
NETWORK MANAGEMENT	131	148
DESKTOP SERVICES	263	178
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGNT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	5852	5557
STATE & LOCAL GOVERNMENT		
PROFESSIONAL SERVICES	2840	2900
CONSULTING	710	744
SOFTWARE DEVELOPMENT	1728	1754
EDUCATION/TRAINING	402	402
SYSTEMS OPERATIONS	1770	1998
PLATFORM OPERATIONS	410	458
APPLICATIONS OPERATIONS	975	1055
NETWORK MANAGEMENT	210	260
DESKTOP SERVICES	175	225
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	485	556
SOFTWARE DEVELOPMENT	261	298
DESIGN/INTEGRATION	75	86
PROJECT MGNT/CONSULTING	109	125
EDUCATION/TRAINING	24	29
OPERATIONS/MAINTENANCE	16	18
TOTAL	5270	5679

(handwritten note next to 2900: "OK", circled)

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
MISCELLANEOUS INDUSTRIES		
PROFESSIONAL SERVICES	132	142
CONSULTING	32	35
SOFTWARE DEVELOPMENT	80	86
EDUCATION/TRAINING	20	21
SYSTEMS OPERATIONS	20	23
PLATFORM OPERATIONS	7	8
APPLICATIONS OPERATIONS	9	10
NETWORK MANAGEMENT	2	2
DESKTOP SERVICES	2	3
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	4	4
SOFTWARE DEVELOPMENT	2	2
DESIGN/INTEGRATION	1	1
PROJECT MGMT/CONSULTING	1	1
EDUCATION/TRAINING	*	*
OPERATIONS/MAINTENANCE	*	*
TOTAL	158	172

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
GRAND TOTAL		
PROFESSIONAL SERVICES	19287	20910
CONSULTING	4649	5192
SOFTWARE DEVELOPMENT	11800	12555
EDUCATION/TRAINING	2838	3163
SYSTEMS OPERATIONS	11210	12402
PLATFORM OPERATIONS	3759	4056
APPLICATIONS OPERATIONS	5161	5495
NETWORK MANAGEMENT	1060	1358
DESKTOP SERVICES	1230	1493
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION (COMM)	2671	3077
SOFTWARE DEVELOPMENT	1429	1644
DESIGN/INTEGRATION	461	530
PROJECT MGMT/CONSULTING	524	605
EDUCATION/TRAINING	135	158
OPERATIONS/MAINTENANCE	122	140
SYSTEMS INTEGRATION (FED)	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	34869	37685

INPUT

IT Intelligence Services

FAX TRANSMITTAL FORM

Date: *5/1/94*

To: Name: *John McElwray / Bob L.*

Tel./Location:

Co.:

Fax No:

From: Name: *JMG- / PP*

Subject:

Confidential: Y / N

Urgent: Y / N

Page: 1 of *4*

File: Chron

Contact

Other:

Here are the changes as discussed

REVIEWED W/ JOHN

ADM 341/05 8/93

Aust 9:30 5/11/94

	TABLE	
	INPUT FORECAS	
	BY INDUSTR	
SEGMENTATION	1992 ($M)	1993 ($M)
DISCRETE MANUFACTURING		
PROFESSIONAL SERVICES	4822	5194
CONSULTING	1192	1342
SOFTWARE DEVELOPMENT	2880	3025
EDUCATION/TRAINING	750	827
SYSTEMS OPERATIONS	781	851
PLATFORM OPERATIONS	256	299
APPLICATIONS OPERATIONS	351	338
NETWORK MANAGEMENT	94	99
DESKTOP SERVICES	80	115
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	739	914
SOFTWARE DEVELOPMENT	398	492
DESIGN/INTEGRATION	137	170
PROJECT MGMT/CONSULTING	135	167
EDUCATION/TRAINING	33	42
OPERATIONS/MAINTENANCE	36	43
TOTAL	6422	7074
PROCESS MANUFACTURING		
PROFESSIONAL SERVICES	2370	2569
CONSULTING	605	644
SOFTWARE DEVELOPMENT	1430	1583
EDUCATION/TRAINING	335	342
SYSTEMS OPERATIONS	898	954
PLATFORM OPERATIONS	271	311
APPLICATIONS OPERATIONS	426	419
NETWORK MANAGEMENT	109	104
DESKTOP SERVICES	92	120
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	170	210
SOFTWARE DEVELOPMENT	93	115
DESIGN/INTEGRATION	25	31
PROJECT MGMT/CONSULTING	30	38
EDUCATION/TRAINING	11	13
OPERATIONS/MAINTENANCE	11	13
TOTAL	3530	3853

	TABLE A						
	INPUT FORECAST WITH INFLATION						
	BY INDUSTRY MODE 5/94						
SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)
DISCRETE MANUFACTURING							
PROFESSIONAL SERVICES	4822	5194	5572	5983	6434	6929	7508
CONSULTING	1192	1342	1493	1687	1906	2154	2434
SOFTWARE DEVELOPMENT	2880	3025	3171	3298	3430	3567	3745
EDUCATION/TRAINING	750	827	908	998	1098	1208	1329
SYSTEMS OPERATIONS	781	851	1126	1364	1652	2012	2455
PLATFORM OPERATIONS	256	299	327	367	411	460	516
APPLICATIONS OPERATIONS	351	338	506	617	753	919	1116
NETWORK MANAGEMENT	94	99	145	178	219	270	333
DESKTOP SERVICES	80	115	148	202	273	363	490
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	739	914	1073	1293	1601	1942	2362
SOFTWARE DEVELOPMENT	398	492	578	697	862	1046	1272
DESIGN/INTEGRATION	137	199	240	298	361	439	
PROJECT MGMT/CONSULTING	135	196	236	292	355	432	
EDUCATION/TRAINING	33	48	58	72	87	106	
OPERATIONS/MAINTENANCE	36	52	62	77	93	113	
TOTAL	6422	6665	7919	8842	9964	11246	12815
PROCESS MANUFACTURING							
PROFESSIONAL SERVICES	2370	2738	3042	3491	3998	4583	5260
CONSULTING	605	686	767	882	1015	1165	1340
SOFTWARE DEVELOPMENT	1430	1587	1900	2210	2560	2970	3445
EDUCATION/TRAINING	335	375	399	423	448	475	
SYSTEMS OPERATIONS	898	1257	1437	1785	2095	2502	
PLATFORM OPERATIONS	271	349	337	438	485	544	
APPLICATIONS OPERATIONS	426	593	700	826	975	1150	
NETWORK MANAGEMENT	109	147	169	196	235	274	
DESKTOP SERVICES	92	168	231	305	399	534	
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	170	210	214	244	282	322	368
SOFTWARE DEVELOPMENT	93	115	118	135	156	178	204
DESIGN/INTEGRATION	25	31	32	37	42	48	55
PROJECT MGMT/CONSULTING	30	38	38	42	50	56	63
EDUCATION/TRAINING	11	13	15	18	20	23	
OPERATIONS/MAINTENANCE	11	13	15	18	20	23	
TOTAL	3530	3628	4681	5403	6350	7399	8664

TABLE
INPUT FORECAS BY INDUSTR

SEGMENTATION	1992 (SM)	1993 (SM)
TELECOMMUNICATIONS		
PROFESSIONAL SERVICES	1200	1250
CONSULTING	252	277
SOFTWARE DEVELOPMENT	788	788
EDUCATION/TRAINING	160	185
SYSTEMS OPERATIONS	182	82
PLATFORM OPERATIONS	68	24
APPLICATIONS OPERATIONS	73	38
NETWORK MANAGEMENT	23	10
DESKTOP SERVICES	18	10
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	145	192
SOFTWARE DEVELOPMENT	81	107
DESIGN/INTEGRATION	23	30
PROJECT MGMT/CONSULTING	28	37
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	7	10
TOTAL	1545	1534
RETAIL DISTRIBUTION		
PROFESSIONAL SERVICES	238	257
CONSULTING	57	66
SOFTWARE DEVELOPMENT	146	153
EDUCATION/TRAINING	35	38
SYSTEMS OPERATIONS	349	432
PLATFORM OPERATIONS	146	195
APPLICATIONS OPERATIONS	127	133
NETWORK MANAGEMENT	42	44
DESKTOP SERVICES	34	60
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	170	126
SOFTWARE DEVELOPMENT	87	65
DESIGN/INTEGRATION	34	25
PROJECT MGMT/CONSULTING	33	24
EDUCATION/TRAINING	8	6
OPERATIONS/MAINTENANCE	8	6
TOTAL	791	875

TABLE A
INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

SEGMENTATION	1992 (SM)	1993 (SM)	1994 (SM)	1995 (SM)	1996 (SM)	1997 (SM)	(
TELECOMMUNICATIONS							
PROFESSIONAL SERVICES	1200	1341	1565	1831	2132	2485	2
CONSULTING	252	297	350	415	491	580	
SOFTWARE DEVELOPMENT	788	845	980	1136	1305	1508	1
EDUCATION/TRAINING	160	199	235	280	336	405	
SYSTEMS OPERATIONS	182	182	235	285	333	391	
PLATFORM OPERATIONS	68		78	99	109	120	
APPLICATIONS OPERATIONS	73	38	97	111	128	152	
NETWORK MANAGEMENT	23		29	33	39	46	
DESKTOP SERVICES	18		31	42	57	73	
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	145	192	212	256	311	377	
SOFTWARE DEVELOPMENT	81	107	118	143	173	210	
DESIGN/INTEGRATION	23	30	34	41	50	61	
PROJECT MGMT/CONSULTING	28	37	41	50	60	73	
EDUCATION/TRAINING	6	8	9	10	13	15	
OPERATIONS/MAINTENANCE	7	10	10	12	15	18	
TOTAL	1545	1625	2043	2414	2833	3326	3
RETAIL DISTRIBUTION							
PROFESSIONAL SERVICES	238	257	275	295	316	340	
CONSULTING	57	66	69	76	84	92	
SOFTWARE DEVELOPMENT	146	153	165	176	186	199	
EDUCATION/TRAINING	35	38	41	43	46	49	
SYSTEMS OPERATIONS	349	432	533	649	794	962	1
PLATFORM OPERATIONS	146	195	211	242	279	323	
APPLICATIONS OPERATIONS	127	133	197	244	305	370	
NETWORK MANAGEMENT	42	44	65	81	101	127	
DESKTOP SERVICES	34	60	60	82	111	142	
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	170	126	250	298	364	441	
SOFTWARE DEVELOPMENT	87	65	128	152	186	225	
DESIGN/INTEGRATION	34	25	50	59	72	87	
PROJECT MGMT/CONSULTING	33	24	48	57	70	85	
EDUCATION/TRAINING	8	6	12	15	18	22	
OPERATIONS/MAINTENANCE	8	6	12	15	18	22	
TOTAL	791	875	1118	1324	1585	1885	2

(handwritten annotations present: "RETURN to oats Number", "1350", "Chg to", "Step")

TABLE

INPUT FORECAS BY INDUSTR

SEGMENTATION	1992 ($M)	1995 ($M)
EDUCATION		
PROFESSIONAL SERVICES	90	98
CONSULTING	23	26
SOFTWARE DEVELOPMENT	54	57
EDUCATION/TRAINING	13	15
SYSTEMS OPERATIONS	244	281
PLATFORM OPERATIONS	50	205
APPLICATIONS OPERATIONS	140	76
NETWORK MANAGEMENT	30	0
DESKTOP SERVICES	24	0
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	59	68
SOFTWARE DEVELOPMENT	33	37
DESIGN/INTEGRATION	10	12
PROJECT MGNT/CONSULTING	11	12
EDUCATION/TRAINING	2	3
OPERATIONS/MAINTENANCE	3	4
TOTAL	417	447
BUSINESS SERVICES		
PROFESSIONAL SERVICES	326	352
CONSULTING	85	96
SOFTWARE DEVELOPMENT	195	207
EDUCATION/TRAINING	46	49
SYSTEMS OPERATIONS	181	221
PLATFORM OPERATIONS	51	58
APPLICATIONS OPERATIONS	89	111
NETWORK MANAGEMENT	22	26
DESKTOP SERVICES	19	26
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	88	134
SOFTWARE DEVELOPMENT	40	61
DESIGN/INTEGRATION	19	29
PROJECT MGNT/CONSULTING	19	29
EDUCATION/TRAINING	5	8
OPERATIONS/MAINTENANCE	5	7
TOTAL	614	733

TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)
EDUCATION						
PROFESSIONAL SERVICES	90	98	110	121	135	148
CONSULTING	23	26	30	33	39	43
SOFTWARE DEVELOPMENT	54	57	63	69	75	82
EDUCATION/TRAINING	13	15	17	19	21	23
SYSTEMS OPERATIONS	244	281	323	377	444	532
PLATFORM OPERATIONS	50	205	60	66	74	83
APPLICATIONS OPERATIONS	140	76	187	217	252	302
NETWORK MANAGEMENT	30	33	36	40	45	54
DESKTOP SERVICES	24	31	40	54	73	93
APPLICATIONS MANAGEMENT						
SYSTEMS INTEGRATION	59	68	79	92	113	131
SOFTWARE DEVELOPMENT	33	37	43	51	62	72
DESIGN/INTEGRATION	10	12	14	16	20	23
PROJECT MGNT/CONSULTING	11	12	14	16	20	23
EDUCATION/TRAINING	2	3	3	4	4	5
OPERATIONS/MAINTENANCE	3	4	5	5	7	8
TOTAL	417	447	552	644	765	904
BUSINESS SERVICES						
PROFESSIONAL SERVICES	326	352	376	408	441	477
CONSULTING	85	96	106	119	133	149
SOFTWARE DEVELOPMENT	195	207	218	232	246	260
EDUCATION/TRAINING	46	49	52	57	62	68
SYSTEMS OPERATIONS	181	221	262	319	380	454
PLATFORM OPERATIONS	51	58	65	74	83	95
APPLICATIONS OPERATIONS	89	111	133	162	191	225
NETWORK MANAGEMENT	22	26	31	38	46	57
DESKTOP SERVICES	19	26	33	45	60	77
APPLICATIONS MANAGEMENT						
SYSTEMS INTEGRATION	88	134	141	163	202	250
SOFTWARE DEVELOPMENT	40	61	65	75	92	114
DESIGN/INTEGRATION	19	29	30	35	43	54
PROJECT MGNT/CONSULTING	19	29	30	35	43	54
EDUCATION/TRAINING	5	8	8	9	12	14
OPERATIONS/MAINTENANCE	5	7	8	9	12	14
TOTAL	614	733	812	935	1083	1258

(handwritten annotations: "RETURN TO ORIG POS'", "STET", "OK")

INPUT

IT Intelligence Services

FAX TRANSMITTAL FORM

Date: 3/10/94

Confidential: Y/N
Urgent: Y/N

To: Name: Bob Goodwin / John Mc Silvray

Tel./Location: _____

Co.: _____

Page: 1 of 10

Fax No: _____

File: Chron

Contact

Other:

From: Name: BB / JMG.

Subject: _____

Here's the corrected #'s

TABLE

IMPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
FEDERAL GOVERNMENT		
PROFESSIONAL SERVICES	2128	2600
CONSULTING	420	517
SOFTWARE DEVELOPMENT	1364	1628
EDUCATION/TRAINING	344	455
SYSTEMS OPERATIONS	1989	1483
PLATFORM OPERATIONS	619	445
APPLICATIONS OPERATIONS	945	712
NETWORK MANAGEMENT	237	148
DESKTOP SERVICES	188	178
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	6006	5557
STATE & LOCAL GOVERNMENT		
PROFESSIONAL SERVICES	2840	2900
CONSULTING	710	744
SOFTWARE DEVELOPMENT	1728	1754
EDUCATION/TRAINING	402	402
SYSTEMS OPERATIONS	1752	1998
PLATFORM OPERATIONS	407	458
APPLICATIONS OPERATIONS	953	1055
NETWORK MANAGEMENT	217	260
DESKTOP SERVICES	175	225
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	484	556
SOFTWARE DEVELOPMENT	260	298
DESIGN/INTEGRATION	75	86
PROJECT MGMT/CONSULTING	109	125
EDUCATION/TRAINING	24	29
OPERATIONS/MAINTENANCE	16	18
TOTAL	5251	5679

TABLE A

IMPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)
FEDERAL GOVERNMENT					
PROFESSIONAL SERVICES	2128	2600	2212	2355	2509
CONSULTING	420	517	437	464	494
SOFTWARE DEVELOPMENT	1364	1628	1574	1574	1701
EDUCATION/TRAINING	344	455	342	317	314
SYSTEMS OPERATIONS	1989	1483	2523	2956	3343
PLATFORM OPERATIONS	619	445	763	839	923
APPLICATIONS OPERATIONS	945	712	1206	1484	1692
NETWORK MANAGEMENT	237	148	298	336	380
DESKTOP SERVICES	188	178	256	297	350
APPLICATIONS MANAGEMENT					
SYSTEMS INTEGRATION	1538	1296	1921	2150	2399
SOFTWARE DEVELOPMENT	826	696			1289
DESIGN/INTEGRATION	237	200	296	332	370
PROJECT MGMT/CONSULTING	347	292	433	485	541
EDUCATION/TRAINING	78	66	97	108	121
OPERATIONS/MAINTENANCE	50	42	63	70	78
TOTAL	5843	5557	6912	7758	8603
STATE & LOCAL GOVERNMENT					
PROFESSIONAL SERVICES	2840	3026	3427	3825	4271
CONSULTING	710	778	885	1009	1150
SOFTWARE DEVELOPMENT	1728	1830	2063	2289	2541
EDUCATION/TRAINING	402	420	479	527	580
SYSTEMS OPERATIONS	1752	1998	2398	2840	3369
PLATFORM OPERATIONS	407	458	511	567	629
APPLICATIONS OPERATIONS	953	1055	1272	1475	1711
NETWORK MANAGEMENT	217	260	323	398	489
DESKTOP SERVICES	175	225	292	400	540
APPLICATIONS MANAGEMENT					
SYSTEMS INTEGRATION	484	556	708	856	1037
SOFTWARE DEVELOPMENT	260	298	380	460	557
DESIGN/INTEGRATION	75	86	109	132	160
PROJECT MGMT/CONSULTING	109	125	160	193	234
EDUCATION/TRAINING	24	29	36	43	52
OPERATIONS/MAINTENANCE	16	18	23	28	34
TOTAL	5251	5805	6825	7921	9217

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
EDUCATION		
PROFESSIONAL SERVICES	90	98
CONSULTING	23	26
SOFTWARE DEVELOPMENT	54	57
EDUCATION/TRAINING	13	15
SYSTEMS OPERATIONS	244	281
PLATFORM OPERATIONS	50	55
APPLICATIONS OPERATIONS	140	162
NETWORK MANAGEMENT	30	33
DESKTOP SERVICES	24	31
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	59	68
SOFTWARE DEVELOPMENT	33	37
DESIGN/INTEGRATION	10	12
PROJECT MGMT/CONSULTING	11	12
EDUCATION/TRAINING	2	3
OPERATIONS/MAINTENANCE	3	4
TOTAL	417	478
BUSINESS SERVICES		
PROFESSIONAL SERVICES	326	352
CONSULTING	85	96
SOFTWARE DEVELOPMENT	195	207
EDUCATION/TRAINING	46	49
SYSTEMS OPERATIONS	181	221
PLATFORM OPERATIONS	51	58
APPLICATIONS OPERATIONS	89	111
NETWORK MANAGEMENT	22	26
DESKTOP SERVICES	19	26
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	88	134
SOFTWARE DEVELOPMENT	40	61
DESIGN/INTEGRATION	19	29
PROJECT MGMT/CONSULTING	19	29
EDUCATION/TRAINING	5	8
OPERATIONS/MAINTENANCE	5	7
TOTAL	614	733

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)
EDUCATION							
PROFESSIONAL SERVICES	90	98	110	121	135	148	162
CONSULTING	23	26	30	33	39	43	48
SOFTWARE DEVELOPMENT	54	57	63	69	75	82	89
EDUCATION/TRAINING	13	15	17	19	21	23	25
SYSTEMS OPERATIONS	244	281	323	377	444	532	628
PLATFORM OPERATIONS	50	55	60	66	74	83	92
APPLICATIONS OPERATIONS	140	162	187	217	252	302	353
NETWORK MANAGEMENT	30	33	36	40	45	54	61
DESKTOP SERVICES	24	31	40	54	73	93	122
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	59	68	79	92	113	131	155
SOFTWARE DEVELOPMENT	33	37	43	51	62	72	85
DESIGN/INTEGRATION	10	12	14	16	20	23	27
PROJECT MGMT/CONSULTING	11	12	14	16	20	23	27
EDUCATION/TRAINING	2	3	3	4	4	5	6
OPERATIONS/MAINTENANCE	3	4	5	5	7	8	10
TOTAL	417	447	552	644	765	904	1067
BUSINESS SERVICES							
PROFESSIONAL SERVICES	326	352	376	408	441	477	517
CONSULTING	85	96	106	119	133	149	167
SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276
EDUCATION/TRAINING	46	49	52	57	62	68	74
SYSTEMS OPERATIONS	181	221	262	319	380	454	548
PLATFORM OPERATIONS	51	58	65	74	83	95	107
APPLICATIONS OPERATIONS	89	111	133	162	191	225	270
NETWORK MANAGEMENT	22	26	31	38	46	57	69
DESKTOP SERVICES	19	26	33	45	60	77	102
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	88	134	141	163	202	250	309
SOFTWARE DEVELOPMENT	40	61	65	75	92	114	141
DESIGN/INTEGRATION	19	29	30	35	43	54	67
PROJECT MGMT/CONSULTING	19	29	30	35	43	54	67
EDUCATION/TRAINING	5	8	8	9	12	14	17
OPERATIONS/MAINTENANCE	5	7	8	9	12	16	17
TOTAL	614	733	812	935	1083	1258	1476

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
INSURANCE		
PROFESSIONAL SERVICES	1569	1600
CONSULTING	384	403
SOFTWARE DEVELOPMENT	970	965
EDUCATION/TRAINING	215	232
SYSTEMS OPERATIONS	1224	1427
PLATFORM OPERATIONS	458	574
APPLICATIONS OPERATIONS	490	522
NETWORK MANAGEMENT	153	152
DESKTOP SERVICES	123	179
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	157	179
SOFTWARE DEVELOPMENT	82	95
DESIGN/INTEGRATION	31	34
PROJECT MGMT/CONSULTING	26	30
EDUCATION/TRAINING	9	10
OPERATIONS/MAINTENANCE	9	10
TOTAL	3073	3385
MEDICAL		
PROFESSIONAL SERVICES	291	319
CONSULTING	70	78
SOFTWARE DEVELOPMENT	181	196
EDUCATION/TRAINING	40	45
SYSTEMS OPERATIONS	1128	1258
PLATFORM OPERATIONS	448	497
APPLICATIONS OPERATIONS	425	462
NETWORK MANAGEMENT	139	142
DESKTOP SERVICES	116	157
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	139	175
SOFTWARE DEVELOPMENT	77	96
DESIGN/INTEGRATION	22	28
PROJECT MGMT/CONSULTING	24	31
EDUCATION/TRAINING	8	10
OPERATIONS/MAINTENANCE	8	10
TOTAL	1674	1909

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	199 ($M)
INSURANCE							
PROFESSIONAL SERVICES	1569	1668	1833	1980	2093	2245	241
CONSULTING	384	420	480	536	582	642	71
SOFTWARE DEVELOPMENT	970	1006	1078	1143	1173	1239	130
EDUCATION/TRAINING	215	242	275	301	338	364	40
SYSTEMS OPERATIONS	1224	1427	1662	1948	2297	2709	320
PLATFORM OPERATIONS	458	574	564	615	676	764	84
APPLICATIONS OPERATIONS	490	522	671	785	926	1093	128
NETWORK MANAGEMENT	153	152	221	266	314	364	43
DESKTOP SERVICES	123	179	206	282	381	488	64
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	157	179	213	258	309	371	44
SOFTWARE DEVELOPMENT	82	95	111	135	162	194	23
DESIGN/INTEGRATION	31	34	41	49	59	71	8
PROJECT MGMT/CONSULTING	26	30	37	44	52	63	7
EDUCATION/TRAINING	9	10	12	15	18	22	2
OPERATIONS/MAINTENANCE	9	10	12	15	18	21	2
TOTAL	3073	3453	3914	4468	5090	5813	671
MEDICAL							
PROFESSIONAL SERVICES	291	319	347	381	413	449	49
CONSULTING	70	78	86	96	107	118	13
SOFTWARE DEVELOPMENT	181	196	210	230	245	265	28
EDUCATION/TRAINING	40	45	51	55	61	66	7
SYSTEMS OPERATIONS	1128	1258	1520	1775	2111	2523	300
PLATFORM OPERATIONS	448	497	557	618	686	769	85
APPLICATIONS OPERATIONS	425	462	571	657	788	954	112
NETWORK MANAGEMENT	139	142	186	217	256	312	36
DESKTOP SERVICES	116	157	206	283	381	488	65
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	139	175	172	190	212	236	26
SOFTWARE DEVELOPMENT	77	96	95	105	117	130	14
DESIGN/INTEGRATION	22	28	27	30	34	38	4
PROJECT MGMT/CONSULTING	24	31	30	33	37	42	4
EDUCATION/TRAINING	8	10	10	11	12	13	1
OPERATIONS/MAINTENANCE	8	10	10	11	12	13	1
TOTAL	1674	1909	2245	2629	3117	3696	44

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 (SM)	1993 (SM)
WHOLESALE DISTRIBUTION		
PROFESSIONAL SERVICES	378	410
CONSULTING	85	90
SOFTWARE DEVELOPMENT	237	260
EDUCATION/TRAINING	56	60
SYSTEMS OPERATIONS	229	247
PLATFORM OPERATIONS	118	110
APPLICATIONS OPERATIONS	58	78
NETWORK MANAGEMENT	29	25
DESKTOP SERVICES	24	34
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	102	122
SOFTWARE DEVELOPMENT	55	67
DESIGN/INTEGRATION	19	23
PROJECT MGMT/CONSULTING	18	22
EDUCATION/TRAINING	5	5
OPERATIONS/MAINTENANCE	5	5
TOTAL	733	813
BANKING AND FINANCE ~		
PROFESSIONAL SERVICES	2379	2588
CONSULTING	585	688
SOFTWARE DEVELOPMENT	1468	1525
EDUCATION/TRAINING	326	375
SYSTEMS OPERATIONS	2458	2838
PLATFORM OPERATIONS	854	722
APPLICATIONS OPERATIONS	1042	1446
NETWORK MANAGEMENT	310	318
DESKTOP SERVICES	252	352
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	265	335
SOFTWARE DEVELOPMENT	131	167
DESIGN/INTEGRATION	53	67
PROJECT MGMT/CONSULTING	53	67
EDUCATION/TRAINING	14	17
OPERATIONS/MAINTENANCE	14	17
TOTAL	5354	6113

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 (SM)	1993 (SM)	1994 (SM)	1995 (SM)	1996 (SM)	1997 (SM)	199 (SM
WHOLESALE DISTRIBUTION							
PROFESSIONAL SERVICES	378	410	434	466	500	538	57
CONSULTING	85	90	99	109	120	132	14
SOFTWARE DEVELOPMENT	237	260	272	291	310	332	35
EDUCATION/TRAINING	56	60	63	66	70	74	7
SYSTEMS OPERATIONS	229	247	308	359	423	502	59
PLATFORM OPERATIONS	118	110	151	168	191	218	24
APPLICATIONS OPERATIONS	58	78	75	86	98	116	13
NETWORK MANAGEMENT	29	25	41	49	59	71	8
DESKTOP SERVICES	24	34	41	56	75	97	12
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	102	122	134	159	184	215	25
SOFTWARE DEVELOPMENT	55	67	74	86	100	116	13
DESIGN/INTEGRATION	19	23	25	29	34	39	4
PROJECT MGMT/CONSULTING	18	22	23	30	34	40	4
EDUCATION/TRAINING	5	5	6	7	8	10	1
OPERATIONS/MAINTENANCE	5	5	6	7	8	10	1
TOTAL	733	813	917	1040	1182	1352	155
BANKING AND FINANCE							
PROFESSIONAL SERVICES	2379	2588	2858	3125	3363	3616	39
CONSULTING	585	688	688	810	890	978	107
SOFTWARE DEVELOPMENT	1468	1525	1760	1870	1990	2115	22
EDUCATION/TRAINING	326	375	410	445	483	523	5
SYSTEMS OPERATIONS	2458	2838	3455	4160	4990	5989	72
PLATFORM OPERATIONS	854	722	1129	1298	1493	1732	19
APPLICATIONS OPERATIONS	1042	1446	1414	1669	1952	2323	27
NETWORK MANAGEMENT	310	318	473	591	733	894	11
DESKTOP SERVICES	252	352	439	602	812	1040	13
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	265	335	366	433	532	681	8
SOFTWARE DEVELOPMENT	131	167	181	215	264	338	4
DESIGN/INTEGRATION	53	67	73	86	106	136	1
PROJECT MGMT/CONSULTING	53	67	72	86	106	135	1
EDUCATION/TRAINING	14	17	20	23	28	36	
OPERATIONS/MAINTENANCE	14	17	20	23	28	36	
TOTAL	5354	6113	7118	8320	9697	11326	133

TABLE

INPUT FORECAS BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
TELECOMMUNICATIONS		
PROFESSIONAL SERVICES	1200	1250
CONSULTING	252	277
SOFTWARE DEVELOPMENT	788	788
EDUCATION/TRAINING	160	185
SYSTEMS OPERATIONS	182	183
PLATFORM OPERATIONS	68	54
APPLICATIONS OPERATIONS	73	84
NETWORK MANAGEMENT	23	24
DESKTOP SERVICES	18	21
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	145	192
SOFTWARE DEVELOPMENT	81	107
DESIGN/INTEGRATION	23	30
PROJECT MGMT/CONSULTING	28	37
EDUCATION/TRAINING	6	8
OPERATIONS/MAINTENANCE	7	10
TOTAL	1545	1646
RETAIL DISTRIBUTION		
PROFESSIONAL SERVICES	238	257
CONSULTING	57	66
SOFTWARE DEVELOPMENT	146	153
EDUCATION/TRAINING	35	38
SYSTEMS OPERATIONS	349	432
PLATFORM OPERATIONS	146	195
APPLICATIONS OPERATIONS	127	133
NETWORK MANAGEMENT	42	44
DESKTOP SERVICES	34	60
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	170	126
SOFTWARE DEVELOPMENT	87	65
DESIGN/INTEGRATION	34	25
PROJECT MGMT/CONSULTING	33	24
EDUCATION/TRAINING	8	6
OPERATIONS/MAINTENANCE	8	6
TOTAL	791	875

TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY NODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	
TELECOMMUNICATIONS								
PROFESSIONAL SERVICES	1200	1341	1565	1831	2132	2485	2899	
CONSULTING	252	297	350	415	491	580	689	
SOFTWARE DEVELOPMENT	788	845	980	1136	1305	1500	1725	
EDUCATION/TRAINING	160	199	235	280	336	405	485	
SYSTEMS OPERATIONS	182	182	235	285	333	391	460	
PLATFORM OPERATIONS	68	24	78	99	109	120	134	
APPLICATIONS OPERATIONS	73	38	97	111	128	152	176	
NETWORK MANAGEMENT	23	10	29	33	39	46	53	
DESKTOP SERVICES	18	10	31	42	57	73	97	
APPLICATIONS MANAGEMENT								
SYSTEMS INTEGRATION	145	192	212	256	311	377	455	
SOFTWARE DEVELOPMENT	81	107	118	143	173	210	254	
DESIGN/INTEGRATION	23	30	34	41	50	61	74	
PROJECT MGMT/CONSULTING	28	37	41	50	60	73	88	
EDUCATION/TRAINING	6	8	9	10	13	15	18	
OPERATIONS/MAINTENANCE	7	10	10	12	15	18	21	
TOTAL	1545	1625	2043	2414	2833	3326	3911	4
RETAIL DISTRIBUTION								
PROFESSIONAL SERVICES	238	257	275	295	316	340	365	
CONSULTING	57	66	69	76	84	92	101	
SOFTWARE DEVELOPMENT	146	153	165	176	186	199	212	
EDUCATION/TRAINING	35	38	41	43	46	49	52	
SYSTEMS OPERATIONS	349	432	533	649	794	962	1182	14
PLATFORM OPERATIONS	146	195	211	242	279	323	376	4
APPLICATIONS OPERATIONS	127	133	197	244	303	370	458	5
NETWORK MANAGEMENT	42	44	65	81	101	127	159	2
DESKTOP SERVICES	34	60	60	82	111	142	189	2
APPLICATIONS MANAGEMENT								
SYSTEMS INTEGRATION	170	126	250	298	364	441	534	7
SOFTWARE DEVELOPMENT	87	65	128	152	186	225	272	3
DESIGN/INTEGRATION	34	25	50	59	72	87	105	1
PROJECT MGMT/CONSULTING	33	24	48	57	70	85	103	1
EDUCATION/TRAINING	8	6	12	15	18	22	27	
OPERATIONS/MAINTENANCE	8	6	12	15	18	22	27	
TOTAL	791	875	1118	1324	1585	1885	2270	28

TABLE

INPUT FORECAS BY INDUSTR

SEGMENTATION	1992 (SM)	1993 (SM)
TRANSPORTATION		
PROFESSIONAL SERVICES	250	269
CONSULTING	59	67
SOFTWARE DEVELOPMENT	157	166
EDUCATION/TRAINING	34	36
SYSTEMS OPERATIONS	215	237
PLATFORM OPERATIONS	109	116
APPLICATIONS OPERATIONS	58	76
NETWORK MANAGEMENT	26	20
DESKTOP SERVICES	22	25
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	103	126
SOFTWARE DEVELOPMENT	57	69
DESIGN/INTEGRATION	17	21
PROJECT MGMT/CONSULTING	21	26
EDUCATION/TRAINING	5	6
OPERATIONS/MAINTENANCE	3	4
TOTAL	590	657
UTILITIES		
PROFESSIONAL SERVICES	274	362
CONSULTING	90	119
SOFTWARE DEVELOPMENT	122	162
EDUCATION/TRAINING	62	81
SYSTEMS OPERATIONS	55	70
PLATFORM OPERATIONS	29	34
APPLICATIONS OPERATIONS	14	19
NETWORK MANAGEMENT	7	8
DESKTOP SERVICES	5	9
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	280	345
SOFTWARE DEVELOPMENT	157	193
DESIGN/INTEGRATION	40	49
PROJECT MGMT/CONSULTING	57	71
EDUCATION/TRAINING	16	20
OPERATIONS/MAINTENANCE	10	12
TOTAL	614	786

TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

SEGMENTATION	1992 (SM)	1993 (SM)	1994 (SM)	1995 (SM)	1996 (SM)	1997 (SM)
TRANSPORTATION						
PROFESSIONAL SERVICES	250	269	286	308	329	350
CONSULTING	59	67	73	80	88	97
SOFTWARE DEVELOPMENT	157	166	173	185	195	205
EDUCATION/TRAINING	34	36	40	43	46	48
SYSTEMS OPERATIONS	215	237	294	342	396	464
PLATFORM OPERATIONS	109	116	135	148	165	183
APPLICATIONS OPERATIONS	58	76	78	91	105	123
NETWORK MANAGEMENT	26	20	41	49	56	69
DESKTOP SERVICES	22	25	40	54	70	89
APPLICATIONS MANAGEMENT						
SYSTEMS INTEGRATION	103	126	151	181	224	268
SOFTWARE DEVELOPMENT	57	69	83	108	123	148
DESIGN/INTEGRATION	17	21	25	31	38	45
PROJECT MGMT/CONSULTING	21	26	31	36	45	54
EDUCATION/TRAINING	5	6	7	8	10	12
OPERATIONS/MAINTENANCE	3	4	5	6	8	9
TOTAL	590	657	771	885	1019	1171
UTILITIES						
PROFESSIONAL SERVICES	274	362	411	468	530	603
CONSULTING	90	119	135	155	177	205
SOFTWARE DEVELOPMENT	122	162	184	209	234	264
EDUCATION/TRAINING	62	81	92	104	119	134
SYSTEMS OPERATIONS	55	70	71	83	97	113
PLATFORM OPERATIONS	29	34	35	39	44	49
APPLICATIONS OPERATIONS	14	19	18	21	24	28
NETWORK MANAGEMENT	7	8	9	11	12	15
DESKTOP SERVICES	5	9	9	12	17	21
APPLICATIONS MANAGEMENT						
SYSTEMS INTEGRATION	280	345	354	397	446	500
SOFTWARE DEVELOPMENT	157	193	198	223	250	280
DESIGN/INTEGRATION	40	49	51	57	64	72
PROJECT MGMT/CONSULTING	57	71	72	81	91	102
EDUCATION/TRAINING	16	20	20	22	25	28
OPERATIONS/MAINTENANCE	10	12	13	14	16	18
TOTAL	614	786	845	960	1090	1237

TABLE

INPUT FORECAS BY INDUSTR

SEGMENTATION	1992 ($M)	1993 ($M)
DISCRETE MANUFACTURING		
PROFESSIONAL SERVICES	4822	5194
CONSULTING	1192	1342
SOFTWARE DEVELOPMENT	2880	3025
EDUCATION/TRAINING	750	827
SYSTEMS OPERATIONS	781	851
PLATFORM OPERATIONS	256	299
APPLICATIONS OPERATIONS	351	338
NETWORK MANAGEMENT	94	99
DESKTOP SERVICES	80	115
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	739	914
SOFTWARE DEVELOPMENT	398	492
DESIGN/INTEGRATION	137	170
PROJECT MGNT/CONSULTING	135	167
EDUCATION/TRAINING	33	42
OPERATIONS/MAINTENANCE	36	43
TOTAL	6422	7074
PROCESS MANUFACTURING		
PROFESSIONAL SERVICES	2370	2569
CONSULTING	605	644
SOFTWARE DEVELOPMENT	1430	1583
EDUCATION/TRAINING	335	342
SYSTEMS OPERATIONS	898	854
PLATFORM OPERATIONS	271	279
APPLICATIONS OPERATIONS	426	375
NETWORK MANAGEMENT	109	93
DESKTOP SERVICES	92	107
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	170	210
SOFTWARE DEVELOPMENT	93	115
DESIGN/INTEGRATION	25	31
PROJECT MGNT/CONSULTING	30	38
EDUCATION/TRAINING	11	13
OPERATIONS/MAINTENANCE	11	13
TOTAL	3530	3740

TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)
DISCRETE MANUFACTURING							
PROFESSIONAL SERVICES	4822	5194	5572	5983	6434	6929	7508
CONSULTING	1192	1342	1493	1687	1906	2154	2434
SOFTWARE DEVELOPMENT	2880	3025	3171	3298	3430	3567	3745
EDUCATION/TRAINING	750	827	908	998	1098	1208	1329
SYSTEMS OPERATIONS	781	851	1126	1364	1656	2012	2455
PLATFORM OPERATIONS	256	299	327	367	411	460	516
APPLICATIONS OPERATIONS	351	338	506	617	753	919	1116
NETWORK MANAGEMENT	94	99	145	178	219	270	333
DESKTOP SERVICES	80	115	148	202	273	343	490
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	739	505	1073	1293	1601	1942	2362
SOFTWARE DEVELOPMENT	398	272	578	697	862	1046	1272
DESIGN/INTEGRATION	137	94	199	240	298	361	439
PROJECT MGNT/CONSULTING	135	92	196	236	292	355	432
EDUCATION/TRAINING	33	23	48	58	72	87	106
OPERATIONS/MAINTENANCE	36	24	52	62	77	93	113
TOTAL	6422	6665	7919	8342	9964	11246	12815
PROCESS MANUFACTURING							
PROFESSIONAL SERVICES	2370	2738	3042	3491	3998	4583	5260
CONSULTING	605	686	767	882	1015	1165	1340
SOFTWARE DEVELOPMENT	1430	1587	1900	2210	2560	2970	3445
EDUCATION/TRAINING	335	365	375	399	423	448	475
SYSTEMS OPERATIONS	898	606	1257	1437	1765	2095	2502
PLATFORM OPERATIONS	271	397	349	337	438	486	544
APPLICATIONS OPERATIONS	426	265	593	700	826	975	1150
NETWORK MANAGEMENT	109	66	147	169	196	235	274
DESKTOP SERVICES	92	76	168	231	305	399	534
APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	170	210	214	244	282	322	368
SOFTWARE DEVELOPMENT	93	115	118	135	154	178	204
DESIGN/INTEGRATION	25	31	32	37	42	48	55
PROJECT MGNT/CONSULTING	30	38	38	42	50	56	63
EDUCATION/TRAINING	11	13	13	15	18	20	23
OPERATIONS/MAINTENANCE	11	13	13	15	18	20	23
TOTAL	3530	3628	4681	5403	6350	7399	8664

TABLE

INPUT FORECAS
BY INDUSTR

SEGMENTATION	1992 (SM)	1993 (SM)
MISCELLANEOUS INDUSTRIES		
PROFESSIONAL SERVICES	132	142
CONSULTING	32	35
SOFTWARE DEVELOPMENT	80	86
EDUCATION/TRAINING	20	21
SYSTEMS OPERATIONS	20	23
PLATFORM OPERATIONS	8	8
APPLICATIONS OPERATIONS	12	10
NETWORK MANAGEMENT		2
DESKTOP SERVICES		3
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	3	4
SOFTWARE DEVELOPMENT	1.5	2
DESIGN/INTEGRATION	0.6	1
PROJECT MGMT/CONSULTING	0.9	1
EDUCATION/TRAINING	*	*
OPERATIONS/MAINTENANCE	*	*
TOTAL	155	172

TABLE

INPUT FORECAS
BY INDUSTR

| | 1992 | 1993 |
SEGMENTATION	($M)	($M)
GRAND TOTAL		
PROFESSIONAL SERVICES	19287	20910
CONSULTING	4649	5192
SOFTWARE DEVELOPMENT	11800	12555
EDUCATION/TRAINING	2838	3163
SYSTEMS OPERATIONS	11705	12403
PLATFORM OPERATIONS	3892	3904
APPLICATIONS OPERATIONS	5203	5583
NETWORK MANAGEMENT	1438	1394
DESKTOP SERVICES	1172	1522
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION (COMM)	2904	3486
SOFTWARE DEVELOPMENT	1553	1864
DESIGN/INTEGRATION	506	606
PROJECT MGMT/CONSULTING	565	680
EDUCATION/TRAINING	146	177
OPERATIONS/MAINTENANCE	135	159
SYSTEMS INTEGRATION (FED)	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT MGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	35597	38095

B

Forecast Data Base and Reconciliation

Appendix B provides the forecast data base (Exhibit B-1) and a reconciliation of this year's forecast with the previous year's (Exhibit B-2).

EXHIBIT B-1

Telecommunications Sector
User Expenditure Forecast by Delivery Mode, 1991-1997

Delivery Modes	1991 ($ M)	Growth 91-92 (%)	1992 ($ M)	1993 ($ M)	1994 ($ M)	1995 ($ M)	1996 ($ M)	1997 ($ M)	CAGR 92-97 (%)
Sector Total	3,107	15	3,582	4,140	4,789	5,538	6,411	7,425	16
Processing Services	928	14	1,058	1,217	1,400	1,610	1,851	2,129	15
- Transaction Processing	928	14	1,058	1,217	1,400	1,610	1,851	2,129	15
Turnkey Systems	472	12	529	592	664	743	832	932	12
Applications Software Products	344	19	410	489	586	701	841	1,008	20
- Mainframe	174	15	200	230	265	304	350	402	15
- Minicomputer	82	22	100	122	149	182	222	270	22
- Workstation/PC	88	25	110	137	172	215	269	336	25
Systems Operations	65	12	73	83	94	106	120	135	13
Systems Integration	198	19	235	285	345	417	505	611	21
Professional Services	999	16	1,159	1,333	1,533	1,762	2,027	2,331	15
Network Services	101	17	118	141	167	199	235	279	19
- Electronic Info. Svcs.	83	17	97	115	135	160	188	222	18
- Network Applications	18	17	21	26	32	39	47	57	22

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY NODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
DISCRETE MANUFACTURING									
PROFESSIONAL SERVICES	4822	5194	5572	5983	6434	6929	7508		8%
CONSULTING	1192	1342	1493	1687	1906	2154	2434		13%
SOFTWARE DEVELOPMENT	2880	3025	3171	3298	3430	3567	3745		4%
EDUCATION/TRAINING	750	827	908	998	1098	1208	1329		10%
SYSTEMS OPERATIONS	781	851	1126	1364	1656	2012	2455		24%
PLATFORM	256	299	327	367	411	460	516		12%
APPLICATIONS	351	338	506	617	753	919	1116		27%
NETWORK	94	99	145	178	219	270	333		27%
DESKTOP	80	115	148	202	273	363	490		34%
SYSTEMS INTEGRATION	739	505	1073	1293	1601	1942	2362		36%
SOFTWARE DEVELOPMENT	396	272	578	697	862	1046	1272		36%
DESIGN/INTEGRATION	137	94	199	240	298	361	439		36%
PROJECT MGMT/CONSULTING	135	92	196	236	292	355	432		36%
EDUCATION/TRAINING	33	23	48	58	72	87	106		36%
OPERATIONS/MAINTENANCE	36	24	52	62	77	93	113		36%
TOTAL	6422	6665	7919	8842	9964	11246	12815		14% ERR
PROCESS MANUFACTURING									ERR
PROFESSIONAL SERVICES	2370	2738	3042	3491	3998	4583	5260		14%
CONSULTING	605	686	767	882	1015	1165	1340		14%
SOFTWARE DEVELOPMENT	1430	1687	1900	2210	2560	2970	3445		15%
EDUCATION/TRAINING	335	365	375	399	423	448	475		5%
SYSTEMS OPERATIONS	898	604	1257	1437	1765	2095	2502		33%
PLATFORM	271	197	349	337	438	486	544		23%
APPLICATIONS	426	265	593	700	826	975	1150		34%
NETWORK	109	66	147	169	196	235	274		33%
DESKTOP	92	76	168	231	305	399	534		48%
SYSTEMS INTEGRATION	170	210	214	244	282	322	368		12%
SOFTWARE DEVELOPMENT	93	115	118	135	154	178	204		12%
DESIGN/INTEGRATION	25	31	32	37	42	48	55		12%
PROJECT MGMT/CONSULTING	30	38	38	42	50	56	63		11%
EDUCATION/TRAINING	11	13	13	15	18	20	23		12%
OPERATIONS/MAINTENANCE	11	13	13	15	18	20	23		12%
TOTAL	3530	3628	4681	5403	6350	7399	8664		19%

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
TRANSPORTATION									ERR
PROFESSIONAL SERVICES	250	269	286	308	329	350	370		7%
CONSULTING	59	67	73	80	88	97	107		10%
SOFTWARE DEVELOPMENT	157	166	173	185	195	205	210		5%
EDUCATION/TRAINING	34	36	40	43	46	48	53		8%
SYSTEMS OPERATIONS	215	237	294	342	396	464	548		18%
PLATFORM	109	116	135	148	165	183	203		12%
APPLICATIONS	58	76	78	91	105	123	143		13%
NETWORK	26	20	41	49	56	69	84		33%
DESKTOP	22	25	40	54	70	89	118		36%
SYSTEMS INTEGRATION	103	126	151	181	224	268	324		21%
SOFTWARE DEVELOPMENT	57	69	83	100	123	148	180		21%
DESIGN/INTEGRATION	17	21	25	31	38	45	54		21%
PROJECT MGMT/CONSULTING	21	26	31	36	45	54	65		20%
EDUCATION/TRAINING	5	6	7	8	10	12	14		18%
OPERATIONS/MAINTENANCE	3	4	5	6	8	9	11		22%
TOTAL	590	657	771	885	1019	1171	1360		16%
									ERR
UTILITIES									ERR
PROFESSIONAL SERVICES	274	362	411	468	530	603	681		13%
CONSULTING	90	119	135	155	177	205	233		14%
SOFTWARE DEVELOPMENT	122	162	184	209	234	264	295		13%
EDUCATION/TRAINING	62	81	92	104	119	134	153		14%
SYSTEMS OPERATIONS	55	70	71	83	97	113	133		14%
PLATFORM	29	34	35	39	44	49	55		10%
APPLICATIONS	14	19	18	21	24	28	32		11%
NETWORK	7	8	9	11	12	15	18		18%
DESKTOP	5	9	9	12	17	21	28		25%
SYSTEMS INTEGRATION	280	345	354	397	446	500	560		10%
SOFTWARE DEVELOPMENT	157	193	198	223	250	280	314		10%
DESIGN/INTEGRATION	40	49	51	57	64	72	81		11%
PROJECT MGMT/CONSULTING	57	71	72	81	91	102	114		10%
EDUCATION/TRAINING	16	20	20	22	25	28	31		9%
OPERATIONS/MAINTENANCE	10	12	13	14	16	18	20		11%
TOTAL	614	786	845	960	1090	1237	1402		12%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
TELECOMMUNICATIONS									ERR
PROFESSIONAL SERVICES	1200	1341	1565	1831	2132	2485	2899		17%
CONSULTING	252	297	350	415	491	580	689		18%
SOFTWARE DEVELOPMENT	788	845	980	1136	1305	1500	1725		15%
EDUCATION/TRAINING	160	199	235	280	336	405	485		20%
SYSTEMS OPERATIONS	182	82	235	285	333	391	460		41%
PLATFORM	68	24	78	99	109	120	134		41%
APPLICATIONS	73	38	97	111	128	152	176		36%
NETWORK	23	10	29	33	39	46	53		40%
DESKTOP	18	10	31	42	57	73	97		58%
SYSTEMS INTEGRATION	149	192	212	256	311	377	455		19%
SOFTWARE DEVELOPMENT	81	107	118	143	173	210	254		19%
DESIGN/INTEGRATION	23	30	34	41	50	61	74		20%
PROJECT MGNT/CONSULTING	28	37	41	50	60	73	88		19%
EDUCATION/TRAINING	6	8	9	10	13	15	18		18%
OPERATIONS/MAINTENANCE	7	10	10	12	15	18	21		16%
TOTAL	1545	1625	2043	2414	2833	3326	3911		19%
									ERR
RETAIL DISTRIBUTION									ERR
PROFESSIONAL SERVICES	238	257	275	295	316	340	365		7%
CONSULTING	57	66	69	76	84	92	101		9%
SOFTWARE DEVELOPMENT	146	153	165	176	186	199	212		7%
EDUCATION/TRAINING	35	38	41	43	46	49	52		6%
SYSTEMS OPERATIONS	349	432	533	649	794	962	1182		22%
PLATFORM	146	195	211	242	279	323	376		14%
APPLICATIONS	127	133	197	244	303	370	458		28%
NETWORK	42	44	65	81	101	127	159		29%
DESKTOP	34	60	60	82	111	142	189		26%
SYSTEMS INTEGRATION	170	126	250	298	364	441	534		33%
SOFTWARE DEVELOPMENT	87	65	128	152	186	225	272		33%
DESIGN/INTEGRATION	34	25	50	59	72	87	105		33%
PROJECT MGNT/CONSULTING	33	24	48	57	70	85	103		34%
EDUCATION/TRAINING	8	6	12	15	18	22	27		35%
OPERATIONS/MAINTENANCE	8	6	12	15	18	22	27		35%
TOTAL	791	875	1118	1324	1585	1885	2270		21%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
WHOLESALE DISTRIBUTION									ERR
PROFESSIONAL SERVICES	378	410	434	466	500	538	578		7%
CONSULTING	85	90	99	109	120	132	145		10%
SOFTWARE DEVELOPMENT	237	260	272	291	310	332	355		6%
EDUCATION/TRAINING	56	60	63	66	70	74	78		5%
SYSTEMS OPERATIONS	229	247	308	359	423	502	594		19%
PLATFORM	118	110	151	168	191	218	246		17%
APPLICATIONS	58	78	75	86	98	116	134		11%
NETWORK	29	25	41	49	59	71	85		28%
DESKTOP	24	34	41	56	75	97	129		31%
SYSTEMS INTEGRATION	102	122	134	159	184	215	250		15%
SOFTWARE DEVELOPMENT	55	67	74	86	100	116	135		15%
DESIGN/INTEGRATION	19	23	25	29	34	39	45		14%
PROJECT MGMT/CONSULTING	18	22	23	30	34	40	46		16%
EDUCATION/TRAINING	5	5	6	7	8	10	12		19%
OPERATIONS/MAINTENANCE	5	5	6	7	8	10	12		19%
TOTAL	733	813	917	1040	1182	1352	1551		14%
									ERR
BANKING AND FINANCE									ERR
PROFESSIONAL SERVICES	2379	2588	2858	3125	3363	3616	3900		9%
CONSULTING	585	688	688	810	890	978	1075		9%
SOFTWARE DEVELOPMENT	1468	1525	1760	1870	1990	2115	2255		8%
EDUCATION/TRAINING	326	375	410	445	483	523	570		9%
SYSTEMS OPERATIONS	2458	2838	3455	4160	4990	5989	7226		21%
PLATFORM	854	722	1129	1298	1495	1732	1996		23%
APPLICATIONS	1042	1446	1414	1669	1952	2323	2735		14%
NETWORK	310	318	473	591	733	894	1109		28%
DESKTOP	252	352	439	602	812	1040	1386		32%
SYSTEMS INTEGRATION	265	335	366	433	532	681	832		20%
SOFTWARE DEVELOPMENT	131	167	181	215	264	338	413		20%
DESIGN/INTEGRATION	53	67	73	86	106	136	166		20%
PROJECT MGMT/CONSULTING	53	67	72	86	106	135	165		20%
EDUCATION/TRAINING	14	17	20	23	28	36	44		21%
OPERATIONS/MAINTENANCE	14	17	20	23	28	36	44		21%
TOTAL	5354	6113	7118	8320	9697	11326	13344		17%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY NODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
INSURANCE									ERR
PROFESSIONAL SERVICES	1569	1668	1833	1960	2093	2245	2417		8%
CONSULTING	384	420	480	536	582	642	712		11%
SOFTWARE DEVELOPMENT	970	1006	1078	1143	1173	1239	1301		5%
EDUCATION/TRAINING	215	242	275	301	338	364	404		11%
SYSTEMS OPERATIONS	1224	1427	1662	1948	2297	2709	3209		18%
PLATFORM	458	574	564	615	676	764	848		8%
APPLICATIONS	490	522	671	785	926	1093	1284		20%
NETWORK	153	152	221	266	314	364	431		23%
DESKTOP	123	179	206	282	381	488	646		29%
SYSTEMS INTEGRATION	157	179	213	258	309	371	446		20%
SOFTWARE DEVELOPMENT	82	95	111	135	162	194	233		20%
DESIGN/INTEGRATION	31	34	41	49	59	71	85		20%
PROJECT MGMT/CONSULTING	26	30	37	44	52	63	76		20%
EDUCATION/TRAINING	9	10	12	15	18	22	27		22%
OPERATIONS/MAINTENANCE	9	10	12	15	18	21	25		20%
TOTAL	3073	3453	3914	4468	5080	5813	6718		14%
									ERR
MEDICAL									ERR
PROFESSIONAL SERVICES	291	319	347	381	413	449	490		9%
CONSULTING	70	78	86	96	107	118	130		11%
SOFTWARE DEVELOPMENT	181	196	210	230	245	265	288		8%
EDUCATION/TRAINING	40	45	51	55	61	66	72		10%
SYSTEMS OPERATIONS	1128	1258	1520	1775	2111	2523	3002		19%
PLATFORM	448	497	557	618	686	769	856		11%
APPLICATIONS	425	462	571	657	788	954	1126		20%
NETWORK	139	142	186	217	256	312	369		21%
DESKTOP	116	157	206	283	381	488	651		33%
SYSTEMS INTEGRATION	139	175	172	190	212	236	260		8%
SOFTWARE DEVELOPMENT	77	96	95	105	117	130	144		8%
DESIGN/INTEGRATION	22	28	27	30	34	38	42		8%
PROJECT MGMT/CONSULTING	24	31	30	33	37	42	46		8%
EDUCATION/TRAINING	8	10	10	11	12	13	14		7%
OPERATIONS/MAINTENANCE	8	10	10	11	12	13	14		7%
TOTAL	1674	1909	2245	2629	3117	3696	4403		18%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
EDUCATION									ERR
PROFESSIONAL SERVICES	90	98	110	121	135	148	162		11%
CONSULTING	23	26	30	33	39	43	48		13%
SOFTWARE DEVELOPMENT	54	57	63	69	75	82	89		9%
EDUCATION/TRAINING	13	15	17	19	21	23	25		11%
SYSTEMS OPERATIONS	244	281	323	377	444	532	628		17%
PLATFORM	50	205	60	66	74	83	92		-15%
APPLICATIONS	160	76	187	217	252	302	353		36%
NETWORK	30	0	36	60	45	54	61		ERR
DESKTOP	24	0	40	54	73	93	122		ERR
SYSTEMS INTEGRATION	59	68	79	92	113	131	155		18%
SOFTWARE DEVELOPMENT	33	37	43	51	62	72	85		18%
DESIGN/INTEGRATION	10	12	14	16	20	23	27		18%
PROJECT MGMT/CONSULTING	11	12	14	16	20	23	27		18%
EDUCATION/TRAINING	2	3	3	4	4	5	6		15%
OPERATIONS/MAINTENANCE	3	4	5	5	7	8	10		20%
TOTAL	417	447	552	644	765	904	1067		19%
									ERR
BUSINESS SERVICES									ERR
PROFESSIONAL SERVICES	326	352	376	408	441	477	517		8%
CONSULTING	85	96	106	119	133	149	167		12%
SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276		6%
EDUCATION/TRAINING	46	49	52	57	62	68	74		9%
SYSTEMS OPERATIONS	181	221	262	319	380	454	548		20%
PLATFORM	51	58	65	74	83	95	107		13%
APPLICATIONS	89	111	133	162	191	225	270		19%
NETWORK	22	26	31	38	46	57	69		22%
DESKTOP	19	26	33	45	60	77	102		31%
SYSTEMS INTEGRATION	88	136	141	163	202	250	309		18%
SOFTWARE DEVELOPMENT	40	61	65	75	92	114	141		18%
DESIGN/INTEGRATION	19	29	30	35	43	54	67		18%
PROJECT MGMT/CONSULTING	19	29	30	35	43	54	67		18%
EDUCATION/TRAINING	5	8	8	9	12	14	17		16%
OPERATIONS/MAINTENANCE	5	7	8	9	12	14	17		19%
TOTAL	614	733	812	935	1083	1258	1476		15%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
FEDERAL GOVERNMENT									ERR
PROFESSIONAL SERVICES	2128	2600	2212	2355	2509	2681	2847		2%
CONSULTING	420	517	437	464	494	528	560		2%
SOFTWARE DEVELOPMENT	1364	1628	1433	1574	1701	1842	1975		4%
EDUCATION/TRAINING	344	455	342	317	314	311	312		-7%
SYSTEMS OPERATIONS	1989	1483	2523	2956	3345	3675	4162		23%
PLATFORM	619	445	763	839	923	1016	1120		20%
APPLICATIONS	945	712	1206	1484	1692	1823	2084		24%
NETWORK	237	148	298	336	380	430	485		27%
DESKTOP	188	178	256	297	350	406	473		22%
SYSTEMS INTEGRATION	1538	1296	1921	2150	2399	2683	3000		18%
SOFTWARE DEVELOPMENT	826	696	1032	1155	1289	1441	1611		18%
DESIGN/INTEGRATION	237	200	296	332	370	414	463		18%
PROJECT MGMT/CONSULTING	347	292	433	485	541	605	676		18%
EDUCATION/TRAINING	78	66	97	108	121	135	151		18%
OPERATIONS/MAINTENANCE	50	42	63	70	78	88	99		19%
TOTAL	5843	5557	6912	7758	8603	9445	10482		14%
									ERR
STATE & LOCAL GOVERNMENT									ERR
PROFESSIONAL SERVICES	2840	3026	3427	3825	4271	4770	5328		12%
CONSULTING	710	776	885	1009	1150	1311	1495		14%
SOFTWARE DEVELOPMENT	1728	1830	2063	2289	2541	2821	3131		11%
EDUCATION/TRAINING	402	420	479	527	580	638	702		11%
SYSTEMS OPERATIONS	1752	1998	2398	2840	3369	4078	4881		20%
PLATFORM	407	458	511	567	629	698	776		11%
APPLICATIONS	953	1055	1272	1475	1711	2088	2653		18%
NETWORK	217	260	323	398	489	601	738		23%
DESKTOP	175	225	292	400	540	691	914		32%
SYSTEMS INTEGRATION	484	556	708	856	1037	1253	1516		22%
SOFTWARE DEVELOPMENT	260	298	380	460	557	673	814		22%
DESIGN/INTEGRATION	75	86	109	132	160	193	234		22%
PROJECT MGMT/CONSULTING	109	125	160	193	234	283	342		22%
EDUCATION/TRAINING	24	29	36	43	52	63	76		21%
OPERATIONS/MAINTENANCE	16	18	23	28	34	41	50		23%
TOTAL	5251	5805	6825	7921	9217	10792	12639		17%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
MISCELLANEOUS INDUSTRIES									ERR
PROFESSIONAL SERVICES	132	142	157	170	185	200	220		9%
CONSULTING	32	35	40	44	49	54	61		12%
SOFTWARE DEVELOPMENT	80	86	94	101	109	117	127		8%
EDUCATION/TRAINING	20	21	23	25	27	29	32		9%
SYSTEMS OPERATIONS	20	23	26	30	35	40	46		15%
PLATFORM	8	8	10	11	12	13	14		12%
APPLICATIONS	12	10	16	19	23	27	32		26%
NETWORK		2							ERR
DESKTOP		3							ERR
SYSTEMS INTEGRATION	3	4	4	6	7	8	9		18%
SOFTWARE DEVELOPMENT	1.5	2	2	3	4	5	6		25%
DESIGN/INTEGRATION	0.6	1	1	1	1	1	1		0%
PROJECT MGNT/CONSULTING	0.9	1	1	2	2	2	2		15%
EDUCATION/TRAINING	*	*	*	*	*	*	*		ERR
OPERATIONS/MAINTENANCE	*	*	*	*	*	*	*		ERR
TOTAL	155	172	187	206	227	248	275		10%

TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

SEGMENTATION	1992 ($M)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 93-98
GRAND TOTAL									
PROFESSIONAL SERVICES	19287	21364	22905	25207	27649	30414	33542		9%
CONSULTING	4649	5303	5738	6515	7325	8248	9297		12%
SOFTWARE DEVELOPMENT	11800	12833	13764	15013	16300	17778	19429		9%
EDUCATION/TRAINING	2838	3228	3403	3679	4024	4388	4816		8%
SYSTEMS OPERATIONS	11705	12052	15993	18924	22435	26539	31576		21%
PLATFORM	3892	3942	4945	5488	6213	7009	7883		15%
APPLICATIONS	5203	5341	7034	8338	9772	11518	13546		20%
NETWORK	1438	1320	2045	2456	2945	3545	4268		26%
DESKTOP	1172	1449	1969	2642	3505	4467	5879		32%
SYSTEMS INTEGRATION (CONM)	2904	3077	4071	4826	5824	6995	8380		22%
SOFTWARE DEVELOPMENT	1553	1644	2174	2580	3106	3729	4467		22%
DESIGN/INTEGRATION	506	530	711	843	1021	1229	1475		23%
PROJECT MGMT/CONSULTING	565	605	795	941	1136	1367	1636		22%
EDUCATION/TRAINING	146	158	204	240	290	347	415		21%
OPERATIONS/MAINTENANCE	135	140	189	222	271	323	387		23%
SYSTEMS INTEGRATION (FED)	1538	1296	1921	2150	2399	2683	3000		18%
SOFTWARE DEVELOPMENT	826	696	1032	1155	1289	1441	1611		18%
DESIGN/INTEGRATION	237	200	296	332	370	414	463		18%
PROJECT MGMT/CONSULTING	347	292	433	485	541	605	676		18%
EDUCATION/TRAINING	78	66	97	108	121	135	151		18%
OPERATIONS/MAINTENANCE	50	42	63	70	78	88	99		19%
TOTAL	35434	37789	44890	51107	58307	66631	76498		15%

Discrete Manufacturing Sector
U.S. Market Forecast by Delivery Mode,
1993-1998

Delivery Modes	1992 ($M)	Growth 92-93 (%)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	CAGR 93-98 (%)
Total Sector Information Services Mkt.	13,092	12	14,632	16,450	18,594	21,152	24,211	27,950	14
Professional Services	4,822	7	5,178	5,571	5,983	6,434	6,929	7,508	8
- IS Consulting	1,192	12	1,333	1,493	1,687	1,906	2,154	2,434	13
- Education & Training	750	10	825	908	998	1,098	1,208	1,329	10
- Custom Software	2,880	5	3,020	3,171	3,298	3,430	3,567	3,745	4
Systems Integration	1,364	19	1,620	1,934	2,321	2,785	3,325	3,972	20
- Equipment	800	19	952	1,142	1,382	1,673	2,007	2,409	20
- Software Products	99	16	115	134	157	183	213	249	17
- Professional Services	420	19	500	595	708	843	1,003	1,193	19
- Other	45	18	53	63	74	87	103	121	18
Systems Operations	705	20	846	1,017	1,226	1,479	1,789	2,168	21
- Platform Operations	260	16	301	349	405	470	545	632	16
- Application Operations	280	19	333	396	472	561	668	795	19
- Desktop Services	90	26	113	141	177	221	276	345	25
- Network Management	75	32	99	131	172	228	301	397	32
Processing Services	870	3	896	923	951	979	1,009	1,039	3
- Transaction Processing	870	3	896	923	951	979	1,009	1,039	3
Network Services	106	21	128	155	188	227	275	334	21
- Electronic Info Services	52	19	62	74	88	104	124	148	19
- Network Applications	54	22	66	81	100	123	151	186	23
Application SW Products	2,285	18	2,695	3,209	3,864	4,703	5,789	7,201	22
- Mainframe	390	5	410	431	452	475	498	523	5
- Minicomputer	1,145	11	1,275	1,415	1,571	1,744	1,936	2,148	11
- Workstation/PC	750	35	1,010	1,364	1,841	2,485	3,355	4,529	35
Turnkey Systems	2,940	11	3,269	3,640	4,062	4,544	5,096	5,728	12
- Equipment	1,300	6	1,380	1,463	1,551	1,644	1,742	1,847	6
- Software Products	1,140	13	1,289	1,457	1,647	1,864	2,109	2,388	13
- Professional Services	500	20	600	720	864	1,037	1,244	1,493	20

1993 Forecast Compendium

EXHIBIT A-1

Discrete Manufacturing Sector
Market Size by Delivery Mode, 1992-1998

Delivery Modes	1992 ($M)	Growth 92-93 (%)	1993 ($M)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	CAGR 93-98 (%)
Sector Total	13,085	12	14,632	16,450	18,594	21,152	24,211	27,950	14
Processing Services	870	3	896	923	951	979	1,009	1,039	3
- Transaction Processing	870	3	896	923	951	979	1,009	1,039	3
Turnkey Systems	2,940	11	3,269	3,640	4,062	4,544	5,096	5,728	12
- Equipment	1,300	6	1,380	1,463	1,551	1,644	1,742	1,847	6
- Software Products	1,140	13	1,289	1,457	1,647	1,864	2,109	2388	13
- Applications Software	990	14	1,130	1,288	1,469	1,674	1,909	2,176	14
- Systems Software	150	6	159	169	179	189	201	213	6
- Professional Services	500	20	600	720	864	1,037	1,244	1,493	20
Applications Software	2,285	18	2,695	3,209	3,864	4,703	5,789	7,201	22
- Mainframe	390	5	410	431	452	475	498	523	5
- Minicomputer	1,145	11	1,275	1,415	1,571	1,744	1,936	2,148	11
- Workstation/PC	750	35	1,010	1,364	1,841	2,485	3,355	4,529	35
Systems Operations	705	20	846	1,017	1,226	1,479	1,789	2,168	21
- Platform Operations	260	16	301	349	405	470	545	632	16
- Applications Operations	280	19	333	396	472	561	668	795	19
- Desktop Services	90	26	113	141	177	221	276	345	25
- Network Management	75	32	99	131	172	228	301	397	32
Systems Integration	1,364	19	1,620	1,934	2,321	2,785	3,325	3,972	20
- Equipment	800	19	952	1,142	1,382	1,673	2,007	2,409	20
- Software Products	99	16	115	134	157	183	213	249	17
- Applications Software	65	14	74	84	97	111	126	144	14
- Systems Software	34	21	41	50	60	72	86	105	21
- Professional Services	420	19	500	595	708	843	1,003	1193	19
- Other	45	18	53	63	74	87	103	121	18
Professional Services	4,815	8	5,178	5,571	5,983	6,434	6,929	7,508	8
- IS Consulting	1,190	12	1,333	1,493	1,687	1,906	2,154	2,434	13
- Education & Training	750	10	825	908	998	1,098	1,208	1,329	10
- Custom Software	2,875	5	3,020	3,171	3,298	3,430	3,567	3,745	4
Network Services	106	21	128	155	188	227	275	334	21
- Electronic Information Svcs.	52	19	62	74	88	104	124	148	19
- Network Applications	54	22	66	81	100	123	151	186	23

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MVDM.XLS			**DISCRETE MANUFACTURING**						
			User Expenditures Forecast						
Copyright 1994 by INPUT			**by Delivery Mode, 1993-1999**						
21-Mar-94			**($ Millions)**						
									CAGR
		Growth							94-99
DELIVERY MODES	1993	93-94	1994	1995	1996	1997	1998	1999	(%)
	($)	(%)	($)	($)	($)	($)	($)	($)	
				13%	14%	15%	15%	16%	
SECTOR TOTAL	14687	13%	16528	18639	21176	24267	28024	32597	15%
				7%	7%	7%	7%	7%	
Professional Services	5194	7%	5580	5961	6377	6831	7327	7869	7%
- IS Consulting	1342	13%	1510	1687	1884	2104	2350	2625	12%
- Education & Training	827	10%	906	1000	1104	1219	1346	1486	10%
- Software Development	3025	5%	3164	3274	3389	3508	3631	3758	4%
- Application Management									
				19%	20%	21%	21%	21%	
Systems Integration	1631	19%	1948	2325	2800	3396	4124	4977	21%
- Equipment	957	20%	1149	1370	1655	2028	2485	3017	21%
- Software Products	116	16%	135	158	187	219	258	303	18%
- Professional Services	505	19%	601	723	870	1046	1259	1515	20%
- Other	53	19%	63	74	88	103	122	142	18%
				21%	21%	21%	21%	21%	
Systems Operations	851	21%	1027	1239	1493	1810	2190	2660	21%
- Platform Operations	299	16%	348	404	470	549	631	732	16%
- Applications Operations	338	19%	403	478	565	670	795	942	19%
- Desktop Services	115	26%	145	183	228	286	360	451	25%
- Network Management	99	32%	131	174	230	305	404	535	33%
				3%	3%	3%	3%	3%	
Processing Services	894	3%	925	952	980	1009	1039	1069	3%
- Transaction Processing	894	3%	925	952	980	1009	1039	1069	3%
- Utility Processing									
- Other Processing									
				21%	21%	21%	22%	21%	
Network Services	129	21%	156	189	229	278	338	410	21%
- Electronic Information Svcs	62	19%	74	88	104	123	146	173	19%
- Network Applications	67	22%	82	101	125	155	192	237	24%
				21%	22%	23%	25%	26%	
Applications Software	2706	20%	3237	3905	4760	5873	7325	9235	23%
- Mainframe	405	5%	427	450	472	497	523	550	5%
- Minicomputer	1284	11%	1430	1585	1756	1946	2155	2390	11%
- Workstation/PC	1017	36%	1380	1870	2532	3430	4647	6295	35%
				11%	12%	12%	12%	12%	
Turnkey Systems	3282	11%	3655	4068	4537	5070	5681	6377	12%
- Equipment	1378	6%	1465	1552	1643	1740	1843	1952	6%
- Software Products	1297	13%	1460	1642	1848	2078	2338	2630	12%
- Professional Services	607	20%	730	874	1046	1252	1500	1795	20%

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